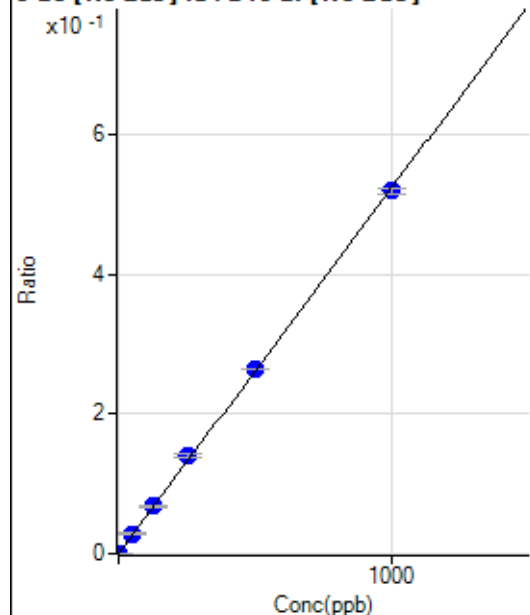


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8021121MS.b\
Analysis File: P8021121MS.batch.bin
DA Date-Time: 2021-02-12 11:13:14
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	S00	2021-02-11 13:20:58
2	008CALS.d	S01	2021-02-11 13:24:12
3	009CALS.d	S02	2021-02-11 13:27:25
4	010CALS.d	S03	2021-02-11 13:30:40
5	011CALS.d	S04	2021-02-11 13:33:51
6	012CALS.d	S05	2021-02-11 13:37:04
7	013CALS.d	S06	2021-02-11 13:40:06
8	014CALS.d	S07	2021-02-11 13:43:07
9	015CALS.d	S08	2021-02-11 13:46:05

9 Be [No Gas] ISTD:6 Li [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	33.0
2	☐	0.100	0.093	71.32	0.0001	P	18.6
3	☐	1.000	1.149	665.88	0.0006	P	10.1
4	☐	50.000	54.463	31117.20	0.0286	P	4.4
5	☐	125.000	128.897	79447.68	0.0676	P	1.6
6	☐	250.000	267.551	163081.58	0.1403	P	3.9
7	☐	500.000	504.731	329508.60	0.2647	P	0.5
8	☐	1000.000	992.537	661995.70	0.5205	P	1.6
9	☐			160.64	0.0001	P	6.3

$$y = 5.2435\text{E-}004 * x + 1.4823\text{E-}005$$

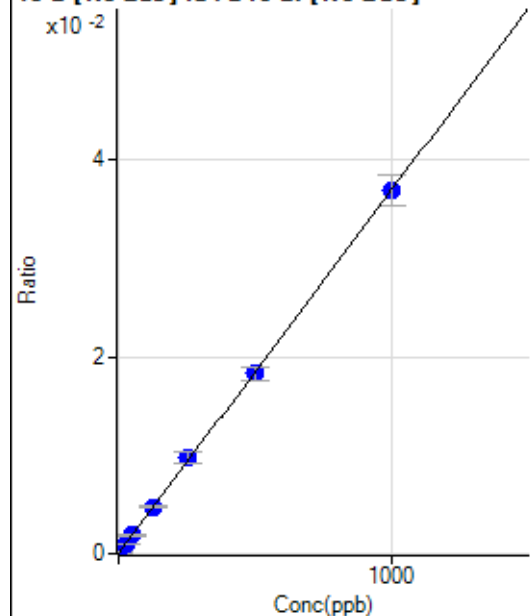
$$R = 0.9998$$

$$DL = 0.02796$$

$$BEC = 0.02827$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	31.99	0.0000	P	16.7
2	☐	2.500	2.225	123.31	0.0001	P	16.4
3	☐	25.000	24.682	1013.84	0.0009	P	10.7
4	☐	50.000	51.027	2081.07	0.0019	P	9.4
5	☐	125.000	127.664	5567.30	0.0047	P	5.3
6	☐	250.000	265.881	11410.87	0.0098	P	11.5
7	☐	500.000	495.621	22799.82	0.0183	P	7.8
8	☐	1000.000	997.843	46812.31	0.0368	P	8.6
9	☐			7515.79	0.0060	P	8.0

$$y = 3.6872\text{E-}005 * x + 2.8213\text{E-}005$$

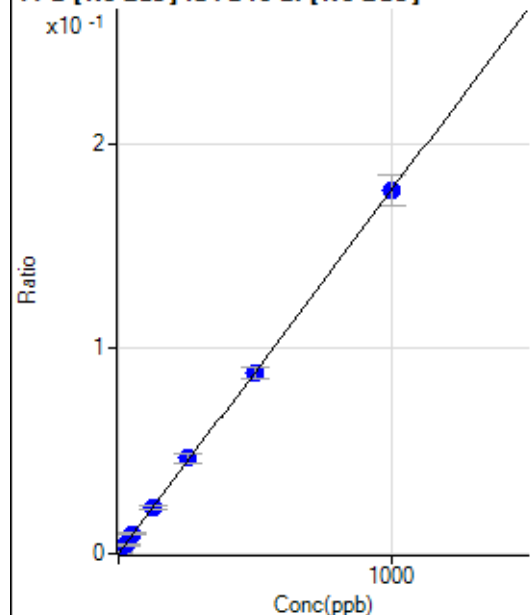
$$R = 0.9999$$

$$DL = 0.3838$$

$$BEC = 0.7652$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	100.65	0.0001	P	8.8
2	☐	2.500	2.356	566.57	0.0005	P	9.7
3	☐	25.000	23.940	4677.17	0.0043	P	10.3
4	☐	50.000	53.175	10367.65	0.0095	P	7.6
5	☐	125.000	125.616	26275.66	0.0223	P	7.1
6	☐	250.000	263.278	54265.09	0.0467	P	10.4
7	☐	500.000	496.719	109744.31	0.0881	P	6.7
8	☐	1000.000	998.112	224969.16	0.1770	P	8.5
9	☐			36013.53	0.0287	P	7.3

$$y = 1.7720\text{E-}004 * x + 8.8827\text{E-}005$$

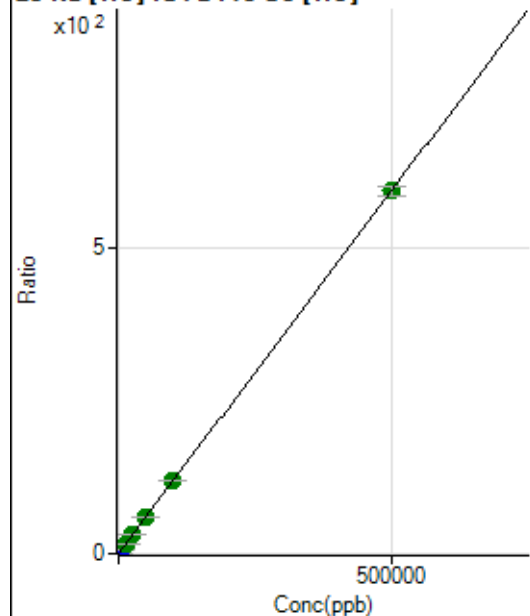
$$R = 0.9999$$

$$DL = 0.1324$$

$$BEC = 0.5013$$

Weight: <None>

Min Conc: 0

23 Na [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19797.22	0.2242	P	0.6
2	☐	50.000	63.274	25211.18	0.2994	P	6.4
3	☐	500.000	502.835	69058.41	0.8220	P	5.6
4	☐	5000.000	5084.802	552906.14	6.2687	P	1.2
5	☐	12500.000	13014.083	1364494.65	15.6946	A	5.7
6	☐	25000.000	25587.284	2713124.84	30.6408	A	0.6
7	☐	50000.000	49552.543	5294320.43	59.1292	A	0.8
8	☐	100000.00	100077.13	10415376.62	119.1897	A	0.9
9	☐	500000.00	499986.25	52668325.83	594.5767	A	2.4

$$y = 0.0012 * x + 0.2242$$

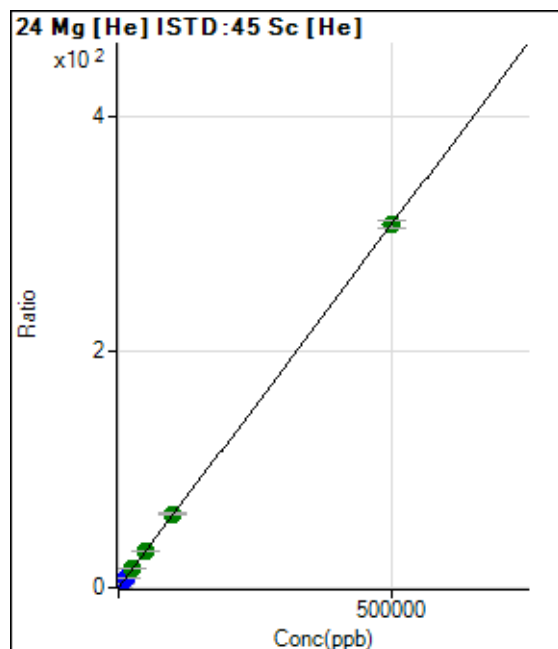
$$R = 1.0000$$

$$DL = 3.288$$

$$BEC = 188.6$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	488.92	0.0055	P	23.8
2	☐	50.000	52.969	3214.33	0.0382	P	7.7
3	☐	500.000	481.712	25386.58	0.3021	P	4.7
4	☐	5000.000	5200.060	282817.66	3.2069	P	2.2
5	☐	12500.000	13324.919	713805.63	8.2088	P	5.1
6	☐	25000.000	26369.332	1437927.08	16.2393	A	0.6
7	☐	50000.000	50889.731	2805570.50	31.3348	A	2.1
8	☐	100000.00	101836.87	5479160.28	62.6993	A	0.4
9	☐	500000.00	499452.58	27238048.53	307.4834	A	2.1

$$y = 6.1563E-004 * x + 0.0055$$

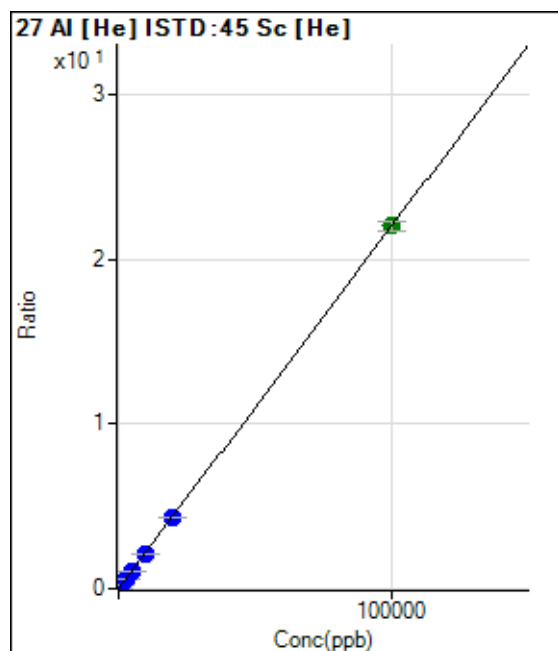
R = 1.0000

DL = 6.442

BEC = 9.007

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	447.45	0.0051	P	7.5
2	☒	2.000					
3	☐	20.000	21.212	818.25	0.0097	P	5.4
4	☐	1000.000	975.111	19366.25	0.2196	P	2.3
5	☐	2500.000	2512.175	48494.84	0.5577	P	5.4
6	☐	5000.000	4969.405	97251.06	1.0983	P	1.0
7	☐	10000.000	9722.461	191956.98	2.1440	P	1.3
8	☐	20000.000	19680.179	378787.00	4.3347	P	0.2
9	☐	100000.00	100093.19	1950929.68	22.0253	A	2.9

$$y = 2.2000E-004 * x + 0.0051$$

R = 1.0000

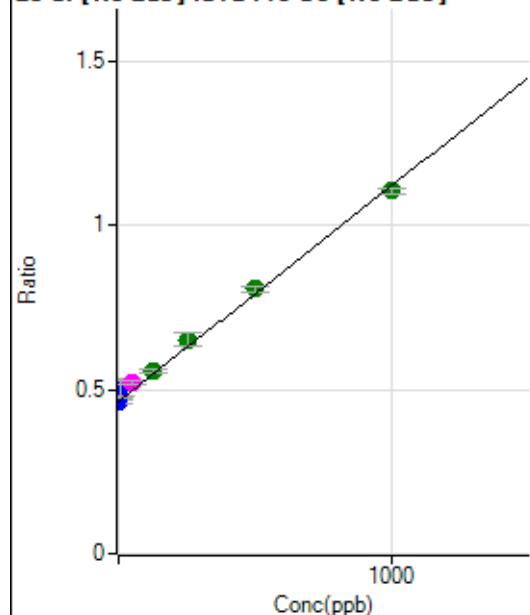
DL = 5.161

BEC = 23.05

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	804391.05	0.4637	P	2.0
2	☐	1.000	20.384	804520.86	0.4771	P	0.7
3	☐	10.000	65.763	814888.63	0.5069	P	10.2
4	☐	50.000	88.788	875428.99	0.5220	M	1.9
5	☐	125.000	143.466	989572.49	0.5580	A	2.5
6	☐	250.000	287.051	1157678.85	0.6524	A	6.1
7	☐	500.000	520.954	1492924.97	0.8062	A	2.4
8	☐	1000.000	975.436	2079682.73	1.1050	A	1.5
9	☐			1003149.50	0.5358	A	5.0

$$y = 6.5745E-004 * x + 0.4637$$

$$R = 0.9984$$

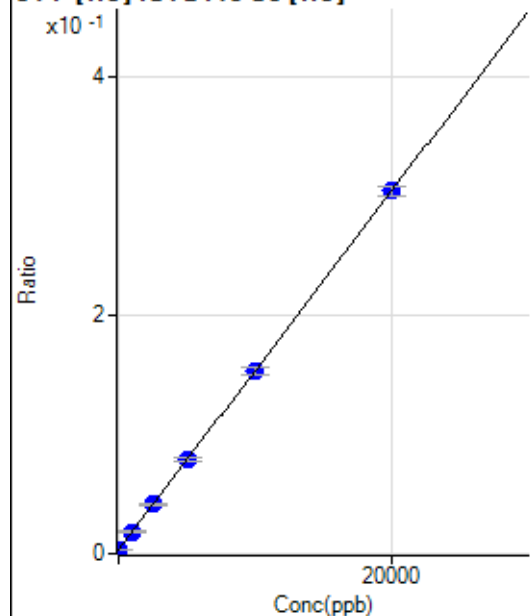
$$DL = 41.7$$

$$BEC = 705.2$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-18.748	255.57	0.0029	P	26.3
2	☐	0.000	23.414	297.23	0.0035	P	6.7
3	☐	0.000	-4.666	261.12	0.0031	P	7.3
4	☐	1000.000	980.446	1580.68	0.0179	P	10.0
5	☐	2500.000	2536.715	3595.01	0.0413	P	4.9
6	☐	5000.000	5021.867	6971.31	0.0787	P	4.1
7	☐	10000.000	9959.996	13695.75	0.1530	P	4.0
8	☐	20000.000	20010.923	26583.16	0.3042	P	2.5
9	☐			247.23	0.0028	P	26.4

$$y = 1.5045E-005 * x + 0.0032$$

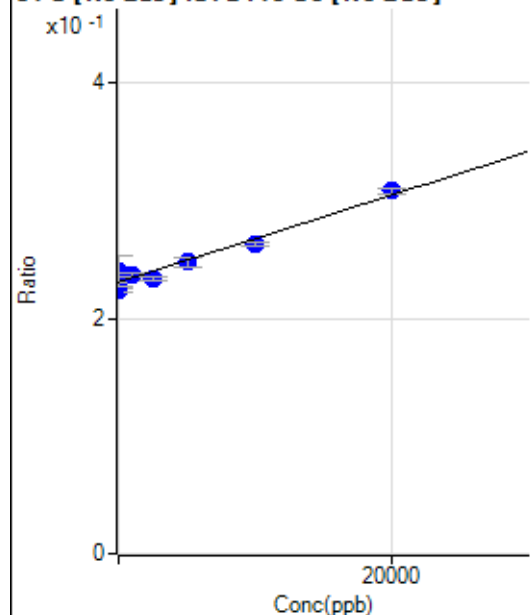
$$R = 1.0000$$

$$DL = 81.21$$

$$BEC = 211.1$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-1947.886	388150.38	0.2237	P	2.0
2	☐	0.000	-518.297	386220.85	0.2290	P	1.2
3	☐	0.000	2466.183	385859.84	0.2401	P	10.5
4	☐	1000.000	1703.200	397818.70	0.2372	P	1.0
5	☐	2500.000	676.258	414061.64	0.2334	P	1.3
6	☐	5000.000	4577.554	440181.75	0.2479	P	3.0
7	☐	10000.000	8730.682	487604.52	0.2633	P	0.8
8	☐	20000.000	20933.078	580470.43	0.3084	P	1.9
9	☐			361685.20	0.1931	P	2.9

$$y = 3.7012\text{E-}006 * x + 0.2309$$

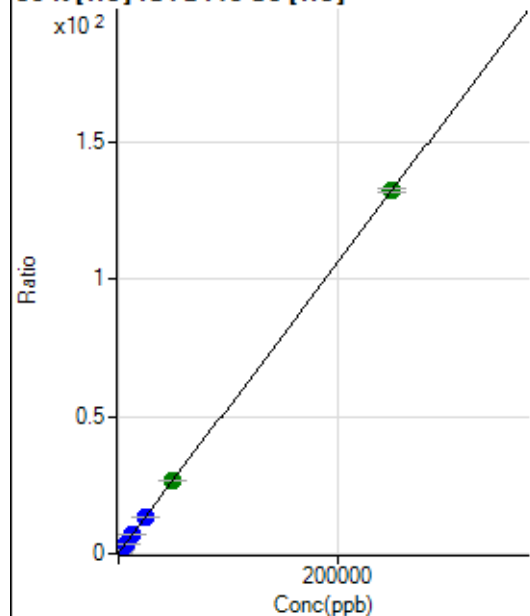
$$R = 0.9789$$

$$DL = 8798$$

$$BEC = 6.24\text{E}+04$$

Weight: <None>

Min Conc: 0

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24412.91	0.2765	P	1.2
2	☒	50.000					
3	☐	500.000	511.888	45898.49	0.5463	P	5.4
4	☐	2500.000	2539.518	142411.71	1.6147	P	1.6
5	☐	6250.000	6531.591	323226.65	3.7183	P	6.2
6	☐	12500.000	12920.467	627329.08	7.0848	P	0.8
7	☐	25000.000	24984.477	1203424.10	13.4418	P	1.8
8	☐	50000.000	49548.333	2305789.12	26.3855	A	0.7
9	☐	250000.00	250063.40	11697987.94	132.0447	A	1.2

$$y = 5.2694\text{E-}004 * x + 0.2765$$

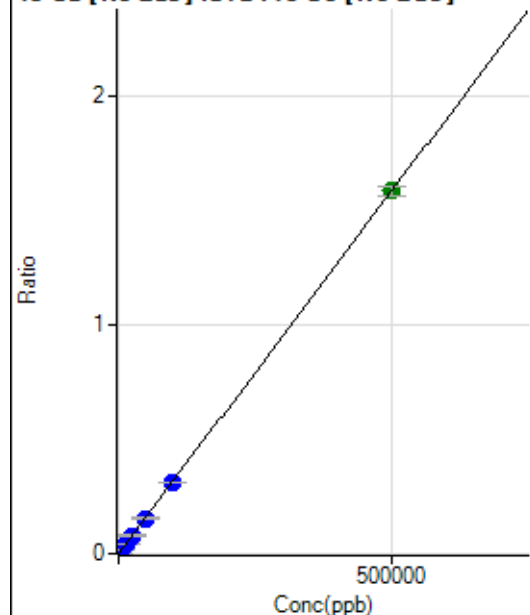
$$R = 1.0000$$

$$DL = 18.92$$

$$BEC = 524.8$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	295.80	0.0002	P	1.4
2	☐	50.000	52.604	568.69	0.0003	P	1.3
3	☐	500.000	498.808	2814.52	0.0018	P	10.9
4	☐	5000.000	5008.312	26906.31	0.0160	P	2.9
5	☐	12500.000	12149.885	68611.83	0.0387	P	0.6
6	☐	25000.000	25105.717	141569.03	0.0797	P	4.3
7	☐	50000.000	48866.851	287158.47	0.1551	P	2.3
8	☐	100000.00	98004.699	585020.60	0.3108	P	1.1
9	☐	500000.00	500515.76	2971415.79	1.5866	A	2.8

$$y = 3.1696\text{E-}006 * x + 1.7049\text{E-}004$$

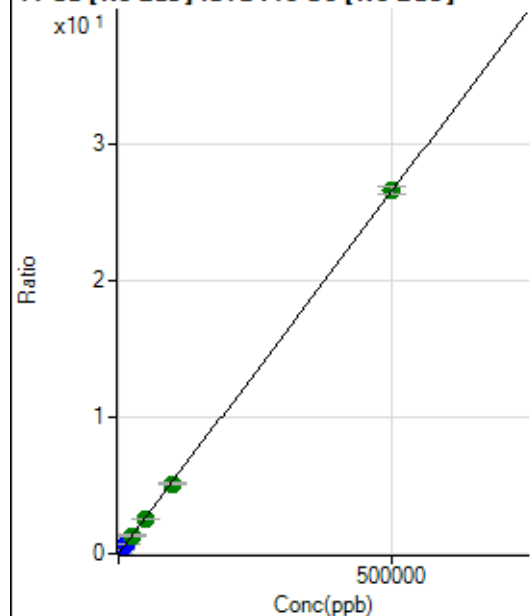
$$R = 1.0000$$

$$DL = 2.336$$

$$BEC = 53.79$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12932.14	0.0075	P	1.9
2	☐	50.000	56.247	17593.55	0.0104	P	1.2
3	☐	500.000	517.470	56029.27	0.0349	P	10.5
4	☐	5000.000	5032.175	459404.61	0.2740	P	3.5
5	☐	12500.000	12141.650	1153790.65	0.6505	P	0.8
6	☐	25000.000	24951.805	2358628.90	1.3289	A	5.4
7	☐	50000.000	47878.458	4710203.32	2.5432	A	2.0
8	☐	100000.00	96261.330	9609028.37	5.1056	A	2.0
9	☐	500000.00	500970.91	49707176.27	26.5395	A	2.2

$$y = 5.2961\text{E-}005 * x + 0.0075$$

$$R = 1.0000$$

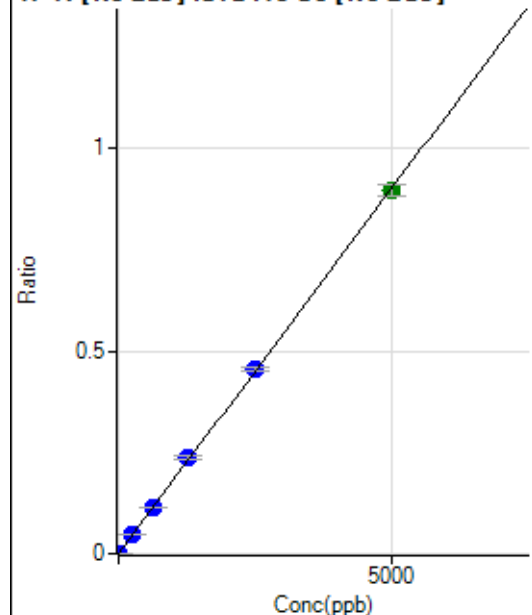
$$DL = 8.135$$

$$BEC = 140.7$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	255.56	0.0001	P	6.8
2	☐	0.500	0.518	405.57	0.0002	P	9.2
3	☐	5.000	5.013	1689.04	0.0011	P	10.4
4	☐	250.000	265.337	80446.13	0.0480	P	4.0
5	☐	625.000	636.387	203717.74	0.1149	P	1.6
6	☐	1250.000	1309.452	419329.22	0.2362	P	3.8
7	☐	2500.000	2527.871	844093.40	0.4558	P	2.7
8	☐	5000.000	4969.011	1686088.12	0.8958	A	3.1
9	☐			555.58	0.0003	P	14.1

$$y = 1.8026E-004 * x + 1.4718E-004$$

$$R = 0.9999$$

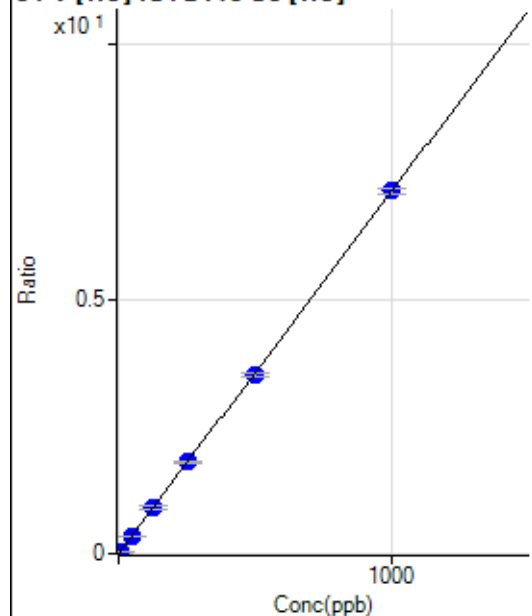
$$DL = 0.167$$

$$BEC = 0.8165$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.55	0.0001	P	70.8
2	☐	0.500	0.502	306.67	0.0036	P	7.3
3	☐	5.000	4.719	2825.86	0.0336	P	8.1
4	☐	50.000	50.005	31390.00	0.3559	P	1.5
5	☐	125.000	126.516	78280.25	0.9004	P	5.7
6	☐	250.000	252.896	159356.98	1.7997	P	1.1
7	☐	500.000	494.640	315114.86	3.5200	P	2.3
8	☐	1000.000	1001.768	622927.81	7.1288	P	1.3
9	☐			103.34	0.0012	P	10.2

$$y = 0.0071 * x + 6.3289E-005$$

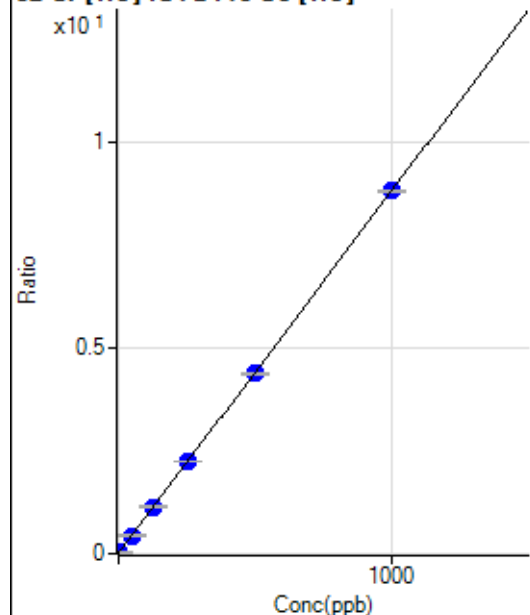
$$R = 1.0000$$

$$DL = 0.01888$$

$$BEC = 0.008894$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	691.14	0.0078	P	7.3
2	☒	0.200					
3	☐	2.000	1.827	2006.83	0.0239	P	5.5
4	☐	50.000	49.317	38930.64	0.4414	P	1.4
5	☐	125.000	128.705	99061.11	1.1393	P	5.4
6	☐	250.000	254.728	198984.33	2.2472	P	0.1
7	☐	500.000	496.187	391247.85	4.3699	P	1.3
8	☐	1000.000	1000.296	769130.94	8.8016	P	0.4
9	☐			5020.93	0.0567	P	2.8

$$y = 0.0088 * x + 0.0078$$

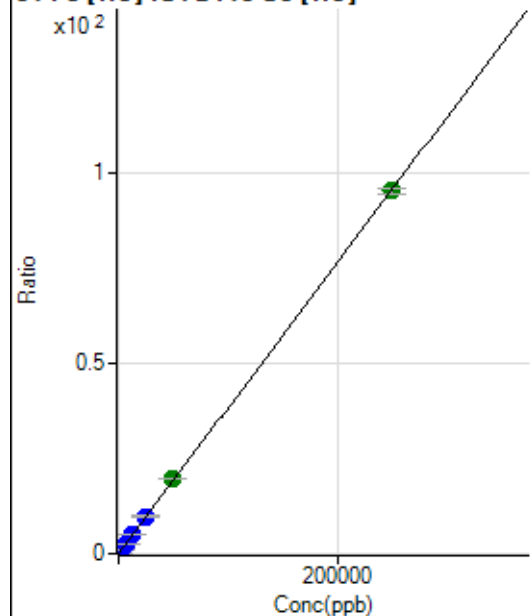
$$R = 1.0000$$

$$DL = 0.1942$$

$$BEC = 0.8903$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	453.72	0.0051	P	7.3
2	☐	5.000	6.632	646.32	0.0077	P	3.2
3	☐	50.000	48.874	2000.18	0.0238	P	3.6
4	☐	2500.000	2587.544	87523.87	0.9924	P	1.6
5	☐	6250.000	6641.413	220804.56	2.5390	P	4.8
6	☐	12500.000	13056.343	441522.16	4.9865	P	1.1
7	☐	25000.000	25472.572	870445.00	9.7236	P	2.6
8	☐	50000.000	51513.531	1717972.03	19.6590	A	1.2
9	☐	250000.00	249611.55	8437220.09	95.2389	A	1.4

$$y = 3.8153E-004 * x + 0.0051$$

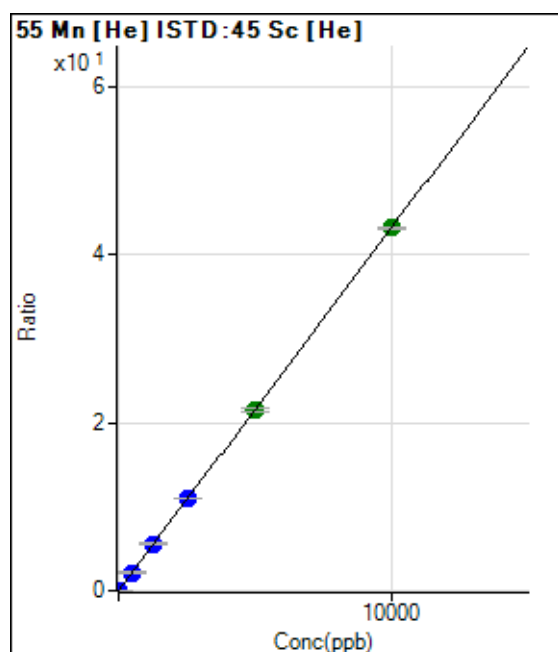
$$R = 1.0000$$

$$DL = 2.937$$

$$BEC = 13.47$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	58.89	0.0007	P	26.9
2	☐	0.100	0.110	96.66	0.0011	P	7.9
3	☐	1.000	1.111	460.01	0.0055	P	4.8
4	☐	500.000	500.029	190768.31	2.1629	P	1.8
5	☐	1250.000	1283.702	482671.41	5.5516	P	5.7
6	☐	2500.000	2534.669	970557.80	10.9610	P	0.7
7	☐	5000.000	4978.721	1927422.28	21.5295	A	2.1
8	☐	10000.000	9997.758	3777825.01	43.2327	A	0.8
9	☐			2359.11	0.0266	P	2.1

$$y = 0.0043 * x + 6.6866E-004$$

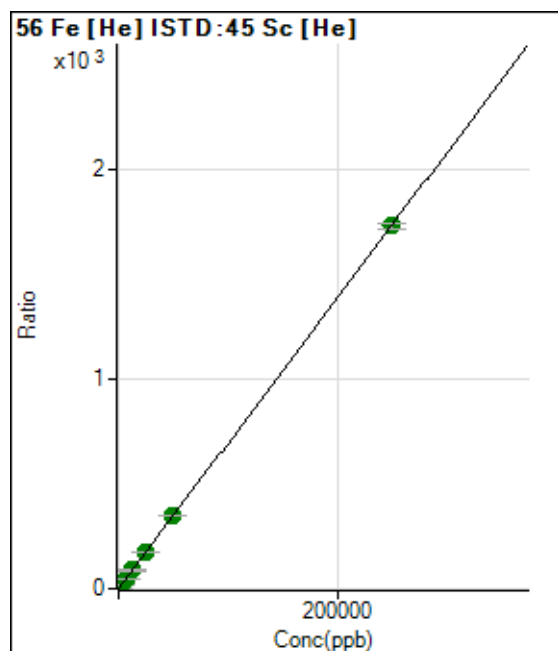
$$R = 1.0000$$

$$DL = 0.1246$$

$$BEC = 0.1546$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2550.29	0.0289	P	2.7
2	☐	5.000	5.699	5764.22	0.0684	P	2.9
3	☐	50.000	49.302	31139.74	0.3705	P	4.5
4	☐	2500.000	2515.974	1540114.79	17.4641	A	3.0
5	☐	6250.000	6476.987	3905423.64	44.9130	A	5.2
6	☐	12500.000	12685.871	7786243.40	87.9393	A	1.7
7	☐	25000.000	24846.925	15418073.72	172.2128	A	1.6
8	☐	50000.000	50241.505	30426797.21	348.1918	A	0.5
9	☐	250000.00	249951.87	153450794.1	1,732.142	A	1.4

$$y = 0.0069 * x + 0.0289$$

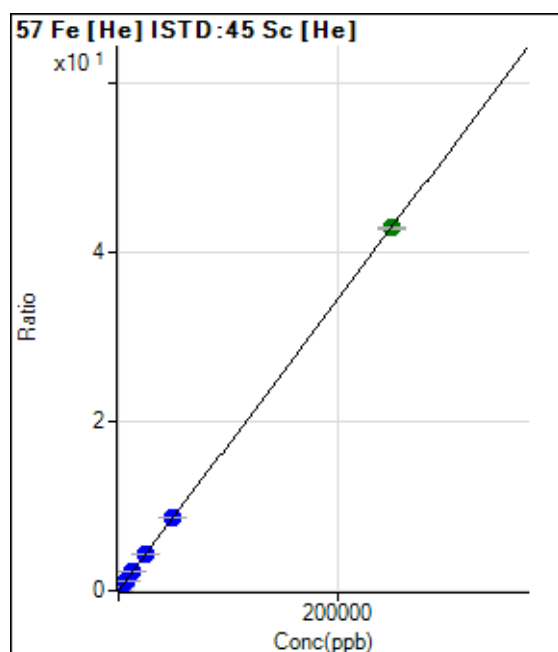
$$R = 1.0000$$

$$DL = 0.3331$$

$$BEC = 4.169$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	151.86	0.0017	P	13.9
2	☐	5.000	4.227	205.56	0.0024	P	16.9
3	☐	50.000	45.337	798.18	0.0095	P	12.1
4	☐	2500.000	2514.577	38262.63	0.4338	P	1.0
5	☐	6250.000	6497.430	97202.96	1.1181	P	6.0
6	☐	12500.000	12762.471	194320.38	2.1946	P	0.7
7	☐	25000.000	25025.017	385091.70	4.3015	P	2.1
8	☐	50000.000	50700.988	761398.74	8.7132	P	0.8
9	☐	250000.00	249837.84	3803353.32	42.9290	A	0.6

$$y = 1.7182\text{E-}004 * x + 0.0017$$

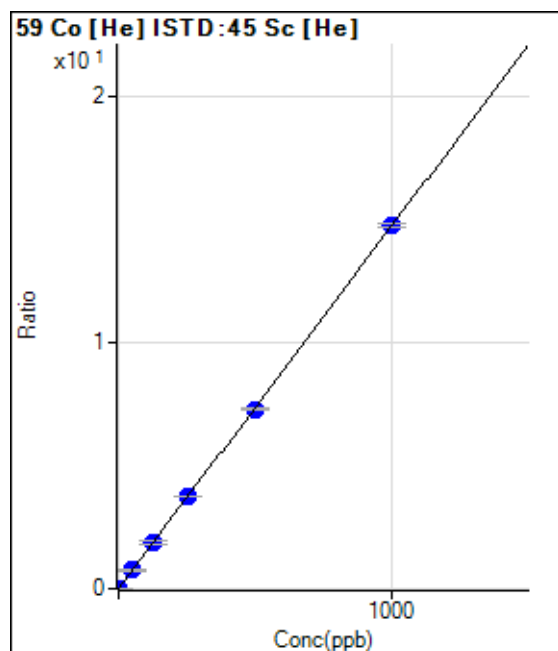
$$R = 1.0000$$

$$DL = 4.165$$

$$BEC = 10.01$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0004	P	16.8
2	☐	0.100	0.116	180.00	0.0021	P	5.5
3	☐	1.000	0.969	1233.40	0.0147	P	5.8
4	☐	50.000	50.484	65594.57	0.7437	P	0.7
5	☐	125.000	127.861	163727.97	1.8828	P	5.1
6	☐	250.000	254.242	331475.61	3.7435	P	0.6
7	☐	500.000	495.426	653034.22	7.2943	P	1.8
8	☐	1000.000	1000.845	1287601.97	14.7353	P	1.2
9	☐			1913.49	0.0216	P	5.1

$$y = 0.0147 * x + 4.1586\text{E-}004$$

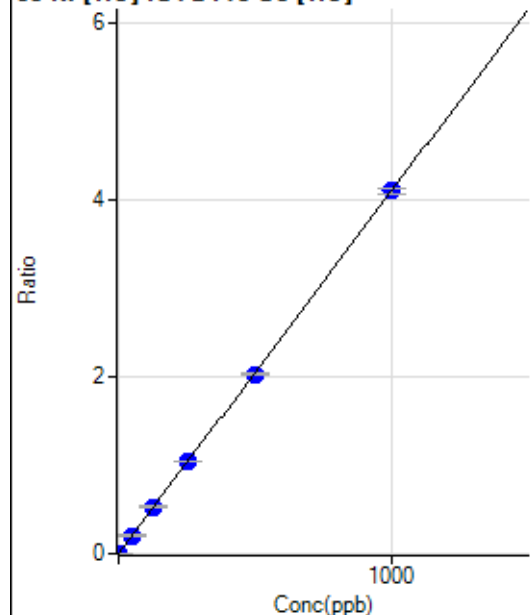
$$R = 1.0000$$

$$DL = 0.01423$$

$$BEC = 0.02825$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0004	P	27.3
2	☐	0.100	0.095	63.34	0.0008	P	23.0
3	☐	1.000	1.073	401.12	0.0048	P	7.7
4	☐	50.000	50.249	18186.14	0.2062	P	2.1
5	☐	125.000	129.358	46108.86	0.5303	P	5.4
6	☐	250.000	255.784	92815.66	1.0482	P	0.6
7	☐	500.000	495.613	181792.30	2.0307	P	2.1
8	☐	1000.000	1000.190	358050.51	4.0977	P	1.9
9	☐			1430.08	0.0161	P	8.3

$$y = 0.0041 * x + 3.6587E-004$$

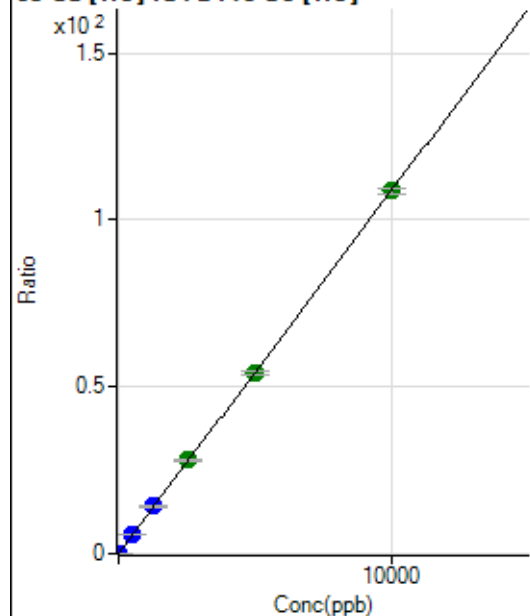
$$R = 1.0000$$

$$DL = 0.07327$$

$$BEC = 0.08931$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	911.15	0.0103	P	12.6
2	☐	0.200	0.248	1096.72	0.0130	P	9.3
3	☐	2.000	2.249	2925.90	0.0348	P	3.5
4	☐	500.000	506.671	487035.97	5.5222	P	1.7
5	☐	1250.000	1301.828	1232466.73	14.1724	P	4.9
6	☐	2500.000	2580.350	2486321.45	28.0809	A	1.6
7	☐	5000.000	4962.158	4833600.38	53.9916	A	2.0
8	☐	10000.000	9992.022	9499089.58	108.7093	A	1.5
9	☐			6930.64	0.0782	P	1.1

$$y = 0.0109 * x + 0.0103$$

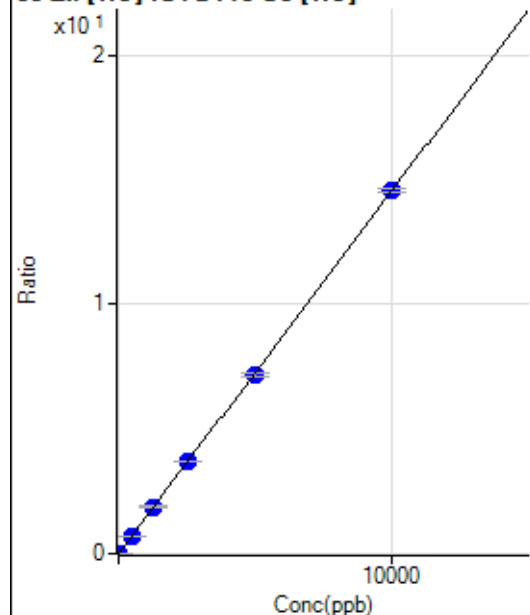
$$R = 0.9999$$

$$DL = 0.3583$$

$$BEC = 0.9498$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.78	0.0011	P	20.8
2	☒	0.200					
3	☐	2.000	2.175	358.90	0.0043	P	4.7
4	☐	500.000	497.948	63932.08	0.7249	P	1.9
5	☐	1250.000	1283.923	162385.72	1.8674	P	5.0
6	☐	2500.000	2549.736	328261.34	3.7073	P	0.8
7	☐	5000.000	4941.621	643148.31	7.1840	P	2.0
8	☐	10000.000	10012.618	1271855.89	14.5550	P	0.9
9	☐			1909.04	0.0215	P	0.8

$$y = 0.0015 * x + 0.0011$$

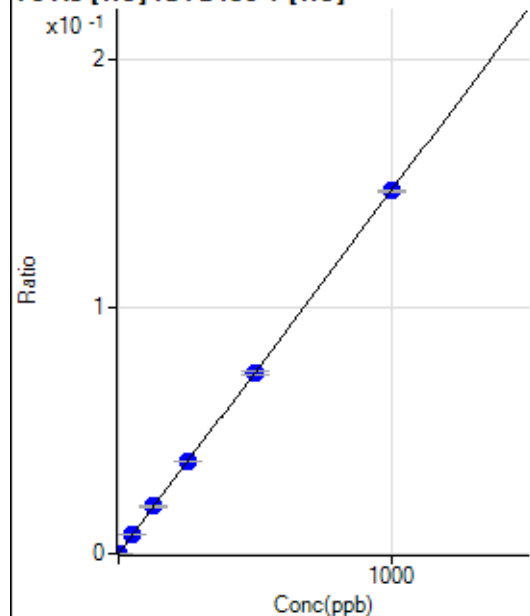
$$R = 1.0000$$

$$DL = 0.4748$$

$$BEC = 0.7604$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	28.1
2	☐	0.100	0.084	15.67	0.0000	P	11.2
3	☐	1.000	1.033	98.34	0.0002	P	23.8
4	☐	50.000	50.529	4721.61	0.0074	P	1.1
5	☐	125.000	129.681	11928.23	0.0191	P	5.1
6	☐	250.000	254.799	24192.05	0.0375	P	0.5
7	☐	500.000	498.820	47413.20	0.0734	P	2.6
8	☐	1000.000	998.779	94166.93	0.1469	P	0.7
9	☐			46.34	0.0001	P	4.6

$$y = 1.4703E-004 * x + 1.3279E-005$$

$$R = 1.0000$$

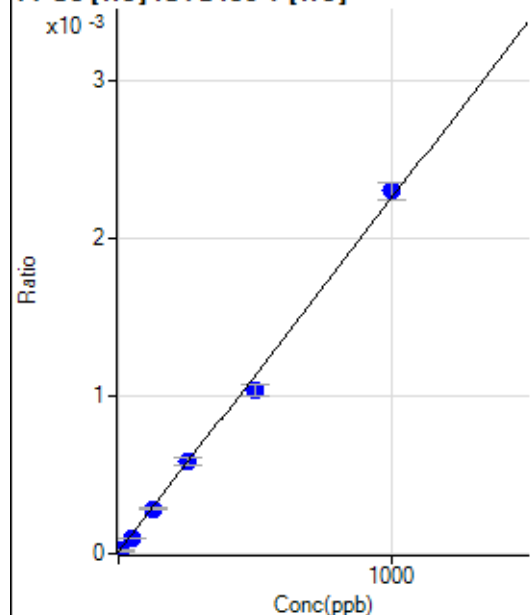
$$DL = 0.07615$$

$$BEC = 0.09032$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	65.2
2	☐	0.500	-0.699	6.67	0.0000	P	47.1
3	☐	5.000	3.491	12.22	0.0000	P	55.1
4	☐	50.000	38.191	62.22	0.0001	P	9.2
5	☐	125.000	121.187	177.78	0.0003	P	3.9
6	☐	250.000	256.338	378.90	0.0006	P	7.6
7	☐	500.000	457.211	671.13	0.0010	P	6.7
8	☐	1000.000	1020.885	1474.54	0.0023	P	5.0
9	☐			2.22	0.0000	P	86.6

$$y = 2.2408\text{E-}006 * x + 1.2377\text{E-}005$$

$$R = 0.9987$$

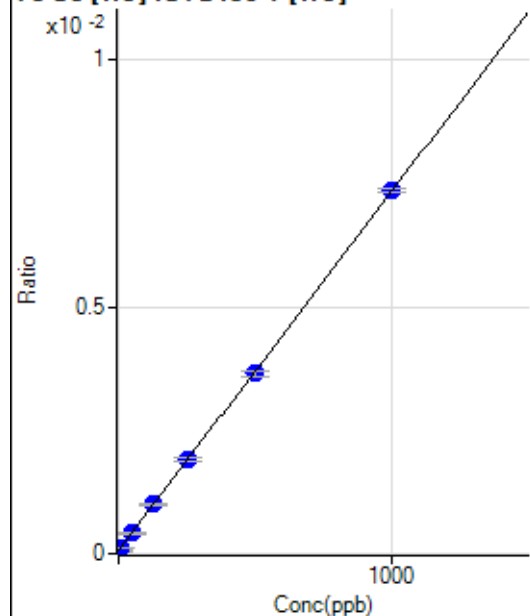
$$DL = 10.81$$

$$BEC = 5.524$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0001	P	24.7
2	☐	0.500	0.194	39.67	0.0001	P	4.1
3	☐	5.000	5.314	61.34	0.0001	P	6.9
4	☐	50.000	48.988	266.03	0.0004	P	7.4
5	☐	125.000	130.011	630.75	0.0010	P	4.6
6	☐	250.000	254.469	1234.51	0.0019	P	3.2
7	☐	500.000	492.313	2353.11	0.0036	P	2.5
8	☐	1000.000	1002.149	4709.27	0.0073	P	1.1
9	☐			38.33	0.0001	P	16.7

$$y = 7.2651\text{E-}006 * x + 6.3719\text{E-}005$$

$$R = 0.9999$$

$$DL = 6.507$$

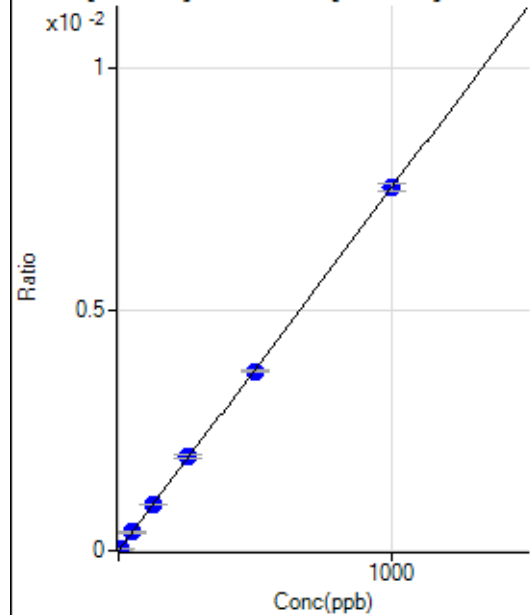
$$BEC = 8.771$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2159.06		P	2.2
2	☐			1975.52		P	6.9
3	☐			2002.22		P	13.3
4	☐			1855.37		P	7.2
5	☐			2052.26		P	4.9
6	☐			2002.23		P	1.5
7	☐			2058.94		P	10.2
8	☐			2072.29		P	6.8
9	☐			2372.65		P	6.0

82 Se [No Gas] ISTD: 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.96	0.0000	P	158.5
2	☐	0.500	0.474	21.68	0.0000	P	115.1
3	☐	5.000	6.038	194.94	0.0000	P	32.3
4	☐	50.000	51.636	1717.31	0.0004	P	7.1
5	☐	125.000	127.142	4408.44	0.0010	P	1.5
6	☐	250.000	260.259	8987.98	0.0020	P	4.9
7	☐	500.000	494.555	17665.56	0.0037	P	0.7
8	☐	1000.000	999.803	35806.64	0.0075	P	2.0
9	☐			-6.05	0.0000	P	-572.

$$y = 7.5260\text{E-}006 * x + 1.3151\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.8307$$

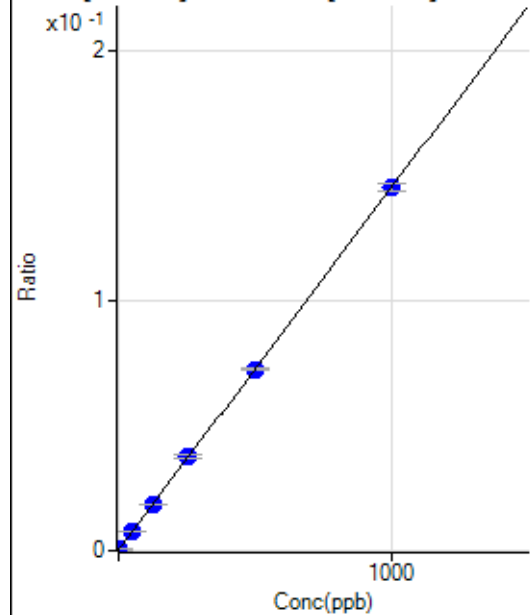
$$BEC = 0.1747$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			716.69		P	1.2
2	☐			687.80		P	1.6
3	☐			698.92		P	7.2
4	☐			724.47		P	7.6
5	☐			712.25		P	2.1
6	☐			698.91		P	9.8
7	☐			752.25		P	9.0
8	☐			713.36		P	1.7
9	☐			712.25		P	2.7

86 Sr [No Gas] ISTD : 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1150.08	0.0003	P	7.4
2	☐	0.100	0.133	1211.19	0.0003	P	8.3
3	☐	1.000	1.167	1780.72	0.0004	P	9.4
4	☐	50.000	51.475	33964.14	0.0077	P	7.2
5	☐	125.000	125.796	85022.28	0.0185	P	1.3
6	☐	250.000	259.103	173341.19	0.0378	P	3.5
7	☐	500.000	498.158	343643.29	0.0724	P	0.7
8	☐	1000.000	998.472	689417.90	0.1449	P	2.0
9	☐			5234.44	0.0011	P	0.8

$$y = 1.4488\text{E-}004 * x + 2.5222\text{E-}004$$

$$R = 1.0000$$

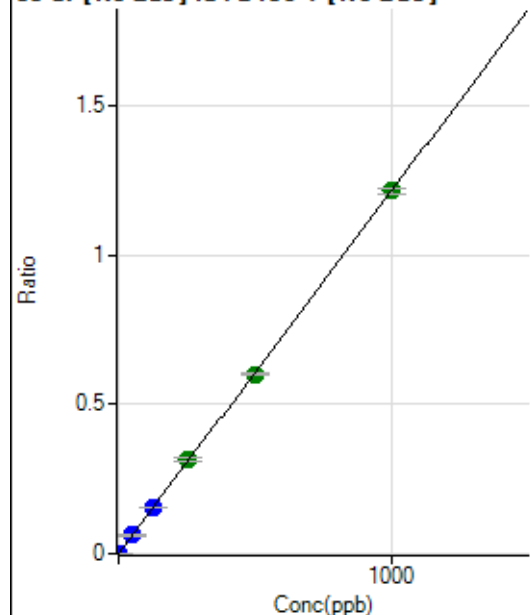
$$DL = 0.3863$$

$$BEC = 1.741$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47.22	0.0000	P	26.5
2	☐	0.100	0.231	1297.32	0.0003	P	8.6
3	☐	1.000	1.103	5706.87	0.0014	P	9.1
4	☐	50.000	52.188	279574.66	0.0635	P	7.1
5	☐	125.000	127.513	713553.38	0.1551	P	0.9
6	☐	250.000	260.466	1452945.01	0.3168	A	3.7
7	☐	500.000	493.849	2849546.68	0.6006	A	1.1
8	☐	1000.000	1000.035	5786083.25	1.2162	A	1.7
9	☐			36008.12	0.0076	P	3.9

$$y = 0.0012 * x + 1.0344E-005$$

$$R = 0.9999$$

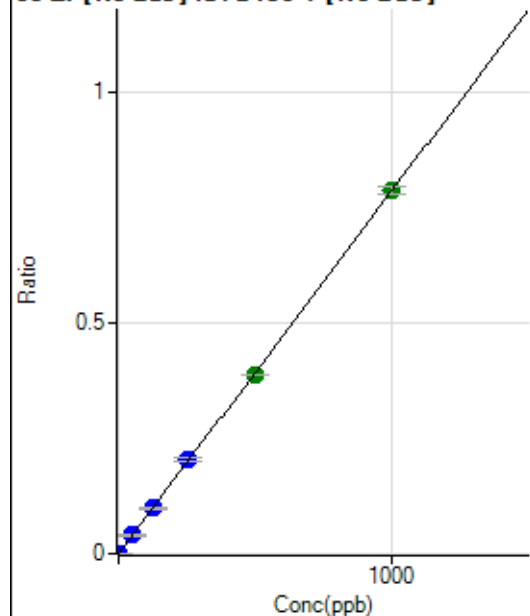
$$DL = 0.006749$$

$$BEC = 0.008505$$

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	236.12	0.0001	P	11.8
2	☐	0.100	0.093	558.36	0.0001	P	3.7
3	☐	1.000	1.056	3714.47	0.0009	P	13.0
4	☐	50.000	51.200	177359.00	0.0403	P	5.7
5	☐	125.000	125.659	454292.20	0.0987	P	1.7
6	☐	250.000	258.339	930786.88	0.2029	P	4.0
7	☐	500.000	493.181	1838132.96	0.3874	A	0.6
8	☐	1000.000	1001.182	3741015.49	0.7864	A	2.1
9	☐			1458.46	0.0003	P	3.1

$$y = 7.8538E-004 * x + 5.1749E-005$$

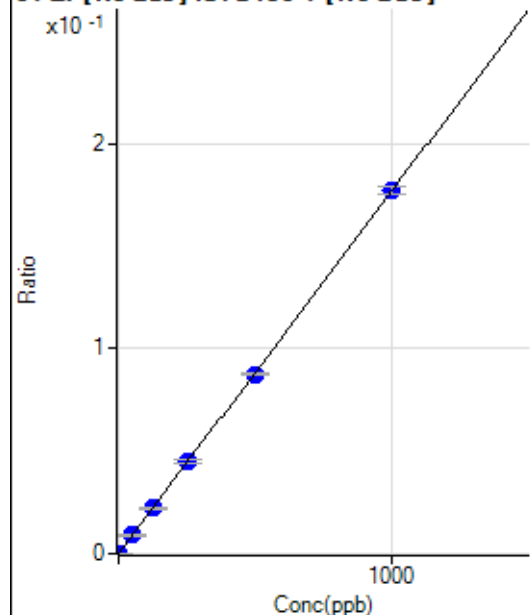
$$R = 0.9999$$

$$DL = 0.02331$$

$$BEC = 0.06589$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD : 89 Y [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	47.4
2	☐	0.100	0.100	122.23	0.0000	P	10.9
3	☐	1.000	0.916	716.71	0.0002	P	29.9
4	☐	50.000	51.579	40136.53	0.0091	P	7.5
5	☐	125.000	124.776	101396.44	0.0220	P	2.9
6	☐	250.000	253.028	204916.97	0.0447	P	4.2
7	☐	500.000	495.201	414849.05	0.0874	P	0.6
8	☐	1000.000	1001.591	841340.86	0.1768	P	2.0
9	☐			366.68	0.0001	P	11.5

$$y = 1.7655\text{E-}004 * x + 9.7568\text{E-}006$$

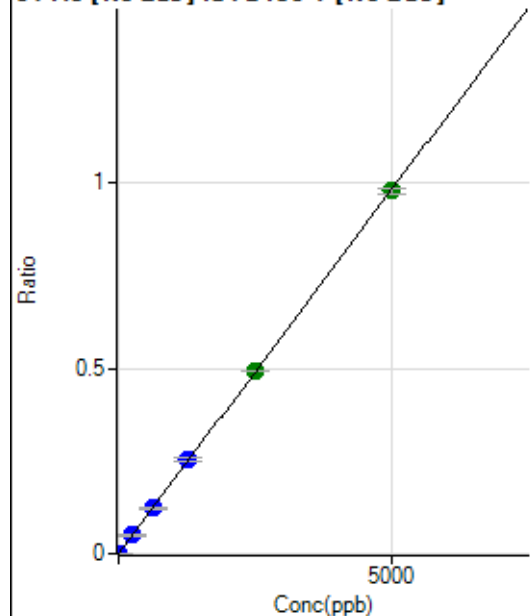
$$R = 1.0000$$

$$DL = 0.07859$$

$$BEC = 0.05526$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD : 89 Y [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0000	P	7.4
2	☐	0.500	0.461	472.24	0.0001	P	12.0
3	☐	5.000	4.905	4136.85	0.0010	P	9.1
4	☐	250.000	254.582	220432.13	0.0500	P	5.9
5	☐	625.000	625.343	565386.98	0.1229	P	2.2
6	☐	1250.000	1295.148	1167353.60	0.2545	P	3.9
7	☐	2500.000	2504.968	2335594.09	0.4923	A	0.4
8	☐	5000.000	4985.957	4661924.45	0.9798	A	1.6
9	☐			2144.66	0.0005	P	3.2

$$y = 1.9651\text{E-}004 * x + 1.5231\text{E-}005$$

$$R = 1.0000$$

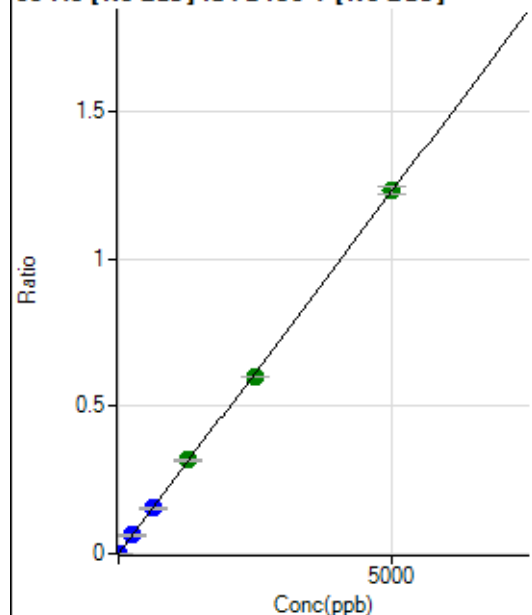
$$DL = 0.01719$$

$$BEC = 0.07751$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	0.6
2	☐	0.500	0.555	616.70	0.0001	P	17.1
3	☐	5.000	5.141	5353.95	0.0013	P	5.7
4	☐	250.000	255.920	277190.48	0.0629	P	5.5
5	☐	625.000	627.721	709867.52	0.1543	P	2.1
6	☐	1250.000	1292.133	1457057.71	0.3176	A	3.1
7	☐	2500.000	2450.473	2857999.35	0.6024	A	0.2
8	☐	5000.000	5013.594	5863875.87	1.2324	A	2.2
9	☐			2678.11	0.0006	P	7.3

$$y = 2.4581\text{E-}004 * x + 1.8265\text{E-}006$$

$$R = 0.9999$$

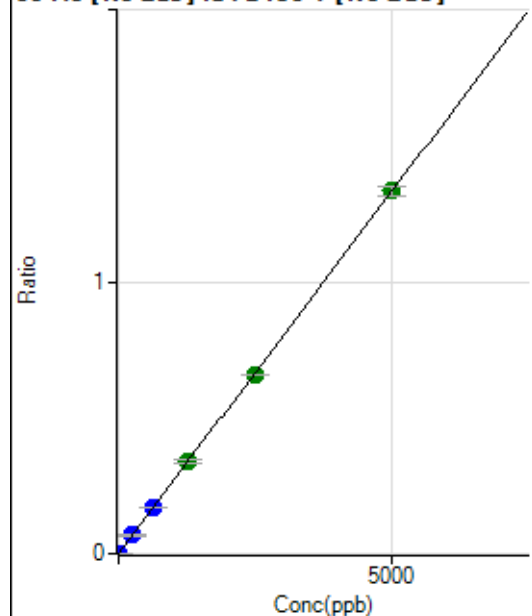
$$DL = 0.0001339$$

$$BEC = 0.007431$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	57.5
2	☐	0.500	0.435	541.69	0.0001	P	4.5
3	☐	5.000	5.147	5801.36	0.0014	P	13.1
4	☐	250.000	257.503	302212.69	0.0686	P	5.6
5	☐	625.000	631.136	773545.39	0.1681	P	1.6
6	☐	1250.000	1276.550	1559925.75	0.3401	A	3.2
7	☐	2500.000	2461.859	3111654.67	0.6558	A	0.3
8	☐	5000.000	5011.290	6351827.92	1.3350	A	2.4
9	☐			3553.33	0.0008	P	4.1

$$y = 2.6639\text{E-}004 * x + 5.4718\text{E-}006$$

$$R = 0.9999$$

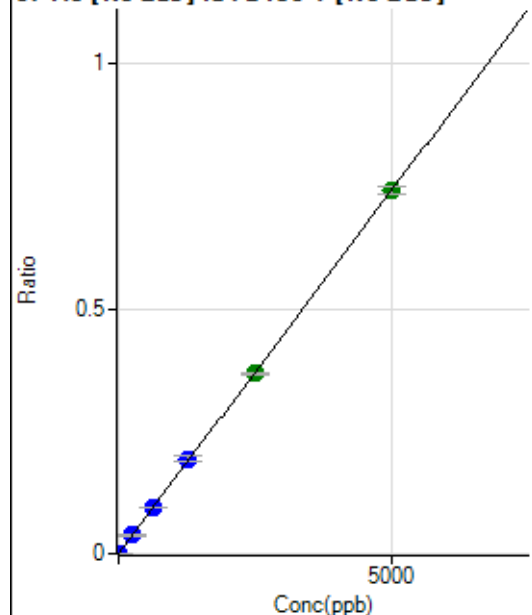
$$DL = 0.03546$$

$$BEC = 0.02054$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	124.5
2	☐	0.500	0.483	333.35	0.0001	P	17.1
3	☐	5.000	5.126	3219.89	0.0008	P	11.7
4	☐	250.000	256.223	167450.78	0.0380	P	6.5
5	☐	625.000	629.865	429889.26	0.0934	P	2.0
6	☐	1250.000	1306.158	888497.77	0.1938	P	5.1
7	☐	2500.000	2478.115	1744270.03	0.3676	A	0.8
8	☐	5000.000	4995.984	3526390.31	0.7412	A	2.2
9	☐			1652.93	0.0003	P	16.9

$$y = 1.4835E-004 * x + 3.0319E-006$$

$$R = 0.9999$$

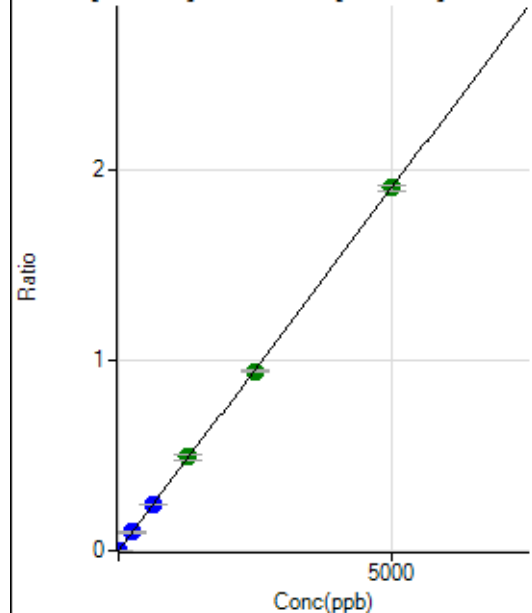
$$DL = 0.07634$$

$$BEC = 0.02044$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	43.8
2	☐	0.500	0.514	883.39	0.0002	P	8.0
3	☐	5.000	5.207	8380.54	0.0020	P	8.9
4	☐	250.000	258.628	433606.22	0.0984	P	5.7
5	☐	625.000	632.876	1108118.25	0.2409	P	2.3
6	☐	1250.000	1288.560	2249032.93	0.4904	A	4.7
7	☐	2500.000	2475.618	4470203.44	0.9422	A	1.0
8	☐	5000.000	5001.135	9056845.95	1.9034	A	1.6
9	☐			4134.10	0.0009	P	13.5

$$y = 3.8059E-004 * x + 2.4392E-006$$

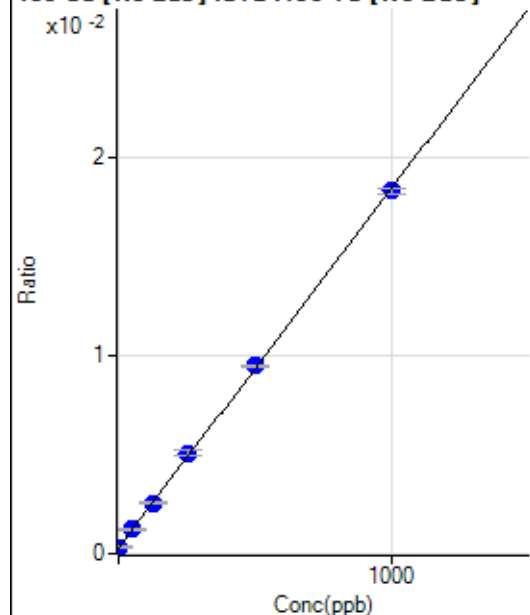
$$R = 1.0000$$

$$DL = 0.008429$$

$$BEC = 0.006409$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	747.26	0.0003	P	5.0
2	☐	0.100	1.171	797.27	0.0003	P	4.7
3	☐	1.000	2.396	788.93	0.0003	P	16.8
4	☐	50.000	51.421	3017.09	0.0012	P	4.4
5	☐	125.000	125.293	6715.72	0.0026	P	1.9
6	☐	250.000	264.396	13362.35	0.0051	P	5.8
7	☐	500.000	506.197	26158.63	0.0095	P	0.6
8	☐	1000.000	993.193	50693.67	0.0183	P	1.3
9	☐			936.17	0.0003	P	7.8

$$y = 1.8174\text{E-}005 * x + 2.9170\text{E-}004$$

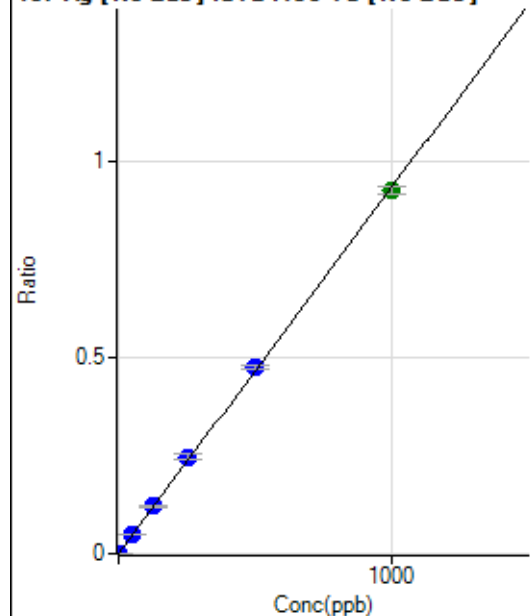
$$R = 0.9999$$

$$DL = 2.425$$

$$BEC = 16.05$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30.56	0.0000	P	31.7
2	☐	0.100	0.089	241.67	0.0001	P	33.5
3	☐	1.000	1.055	2341.94	0.0010	P	11.1
4	☐	50.000	53.941	123770.08	0.0503	P	2.6
5	☐	125.000	128.975	314043.57	0.1201	P	2.5
6	☐	250.000	263.996	644792.95	0.2459	P	5.0
7	☐	500.000	509.422	1307629.81	0.4745	P	1.5
8	☐	1000.000	991.096	2550862.47	0.9231	A	2.3
9	☐			958.40	0.0003	P	21.3

$$y = 9.3142\text{E-}004 * x + 1.1934\text{E-}005$$

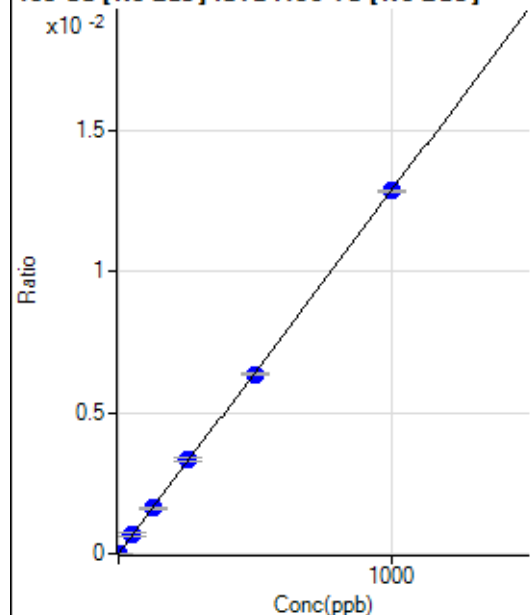
$$R = 0.9998$$

$$DL = 0.0122$$

$$BEC = 0.01281$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8.33	0.0000	P	50.2
2	☐	0.100	0.087	11.11	0.0000	P	57.7
3	☐	1.000	1.271	47.22	0.0000	P	38.4
4	☐	50.000	53.439	1694.57	0.0007	P	13.9
5	☐	125.000	125.294	4217.37	0.0016	P	3.9
6	☐	250.000	261.188	8807.08	0.0034	P	4.3
7	☐	500.000	495.153	17534.89	0.0064	P	2.1
8	☐	1000.000	999.417	35481.78	0.0128	P	0.8
9	☐			47.22	0.0000	P	50.3

$$y = 1.2844\text{E-}005 * x + 3.2571\text{E-}006$$

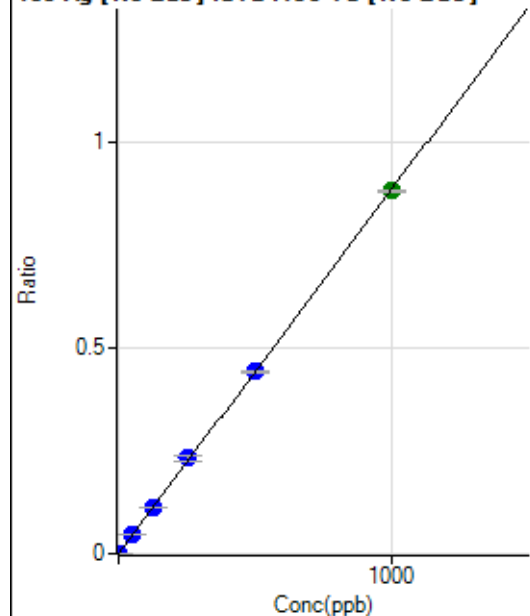
$$R = 0.9999$$

$$DL = 0.3822$$

$$BEC = 0.2536$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0000	P	43.6
2	☐	0.100	0.070	169.45	0.0001	P	15.2
3	☐	1.000	1.013	2122.45	0.0009	P	7.3
4	☐	50.000	53.410	116178.20	0.0472	P	4.8
5	☐	125.000	127.491	294382.47	0.1126	P	2.9
6	☐	250.000	263.519	610187.62	0.2328	P	6.1
7	☐	500.000	499.772	1216683.59	0.4415	P	1.0
8	☐	1000.000	996.253	2432079.48	0.8801	A	0.5
9	☐			919.50	0.0003	P	7.6

$$y = 8.8336\text{E-}004 * x + 4.3397\text{E-}006$$

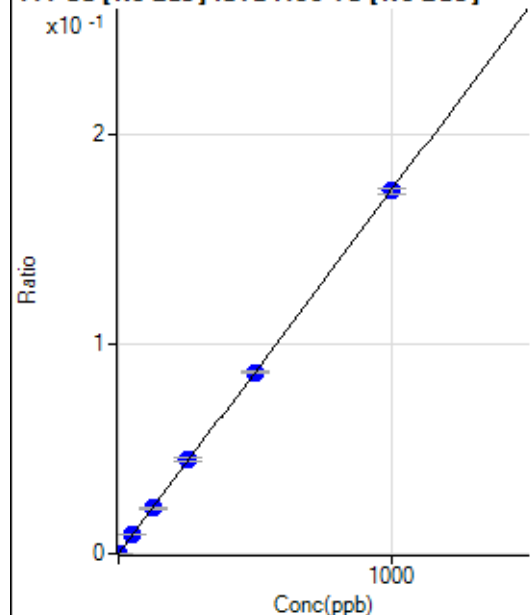
$$R = 0.9999$$

$$DL = 0.006425$$

$$BEC = 0.004913$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	119.32	0.0000	P	10.5
2	☐	0.100	0.111	167.65	0.0001	P	2.0
3	☐	1.000	1.126	566.69	0.0002	P	20.2
4	☐	50.000	53.282	22868.97	0.0093	P	3.6
5	☐	125.000	126.425	57437.43	0.0220	P	3.8
6	☐	250.000	258.747	117792.74	0.0449	P	5.7
7	☐	500.000	499.168	238752.64	0.0866	P	1.9
8	☐	1000.000	997.887	478485.74	0.1732	P	1.8
9	☐			376.27	0.0001	P	2.7

$$y = 1.7347\text{E-}004 * x + 4.6576\text{E-}005$$

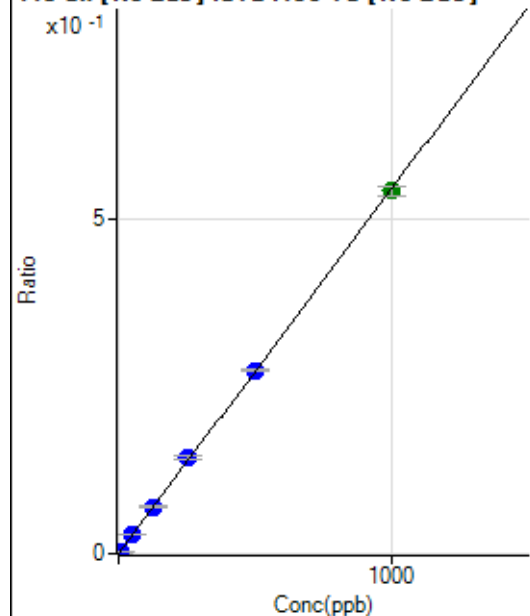
$$R = 1.0000$$

$$DL = 0.08466$$

$$BEC = 0.2685$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	155.56	0.0001	P	34.0
2	☐	0.500	0.524	883.39	0.0003	P	7.0
3	☐	5.000	5.514	7229.89	0.0031	P	9.3
4	☐	50.000	52.918	71227.61	0.0289	P	4.2
5	☐	125.000	128.251	183040.43	0.0700	P	3.3
6	☐	250.000	263.136	376686.25	0.1436	P	4.4
7	☐	500.000	502.741	756117.05	0.2744	P	1.4
8	☐	1000.000	994.791	1499938.89	0.5428	A	2.7
9	☐			963.95	0.0003	P	2.3

$$y = 5.4561\text{E-}004 * x + 6.0663\text{E-}005$$

$$R = 0.9999$$

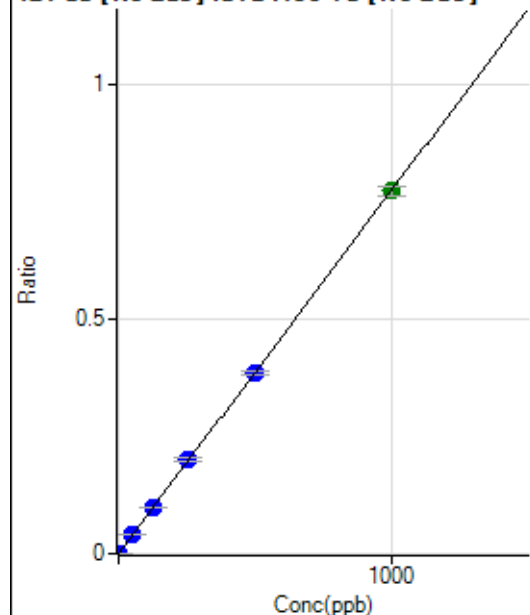
$$DL = 0.1133$$

$$BEC = 0.1112$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.56	0.0000	P	173.2
2	☐	0.200	0.191	380.57	0.0001	P	19.7
3	☐	2.000	2.102	3839.54	0.0016	P	5.0
4	☐	50.000	51.875	98644.47	0.0401	P	4.5
5	☐	125.000	127.060	256566.36	0.0982	P	2.7
6	☐	250.000	258.600	523779.34	0.1998	P	5.2
7	☐	500.000	496.943	1057997.63	0.3839	P	1.8
8	☐	1000.000	999.027	2132528.06	0.7717	A	2.9
9	☐			1522.35	0.0005	P	10.6

$$y = 7.7246\text{E-}004 * x + 2.1580\text{E-}006$$

$$R = 1.0000$$

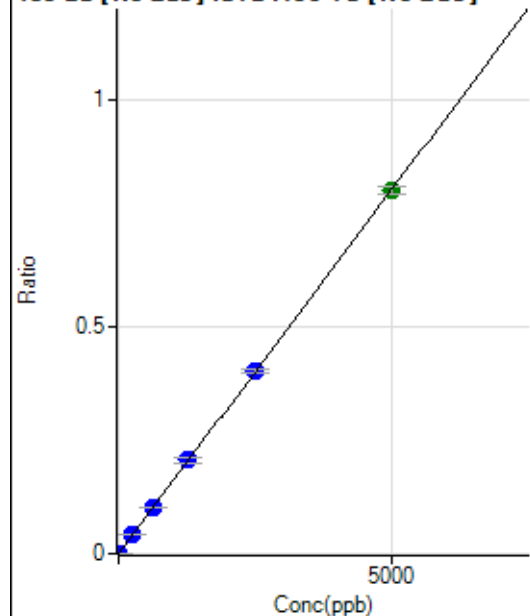
$$DL = 0.01452$$

$$BEC = 0.002794$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD : 159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	16.67	0.0000	P	132.1
2	☐	1.000	0.934	397.24	0.0002	P	26.8
3	☐	10.000	10.697	4047.96	0.0017	P	13.5
4	☐	250.000	259.898	102565.30	0.0417	P	4.7
5	☐	625.000	631.132	264472.73	0.1012	P	1.9
6	☐	1250.000	1282.511	538976.45	0.2056	P	5.3
7	☐	2500.000	2506.242	1107089.45	0.4017	P	2.0
8	☐	5000.000	4987.488	2209016.74	0.7994	A	2.1
9	☐			855.61	0.0003	P	0.2

$$y = 1.6028\text{E-}004 * x + 6.4811\text{E-}006$$

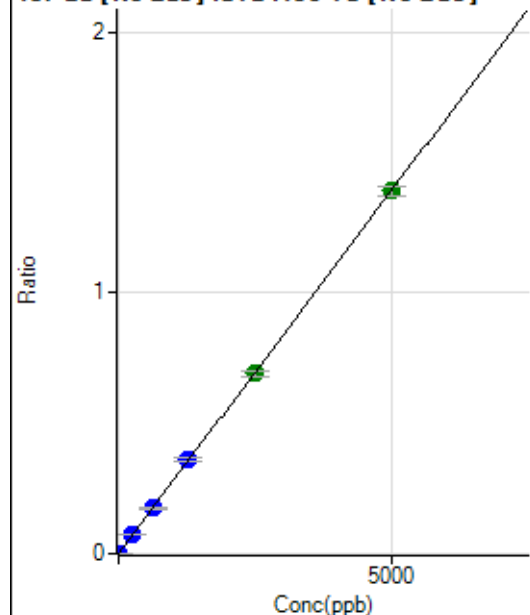
$$R = 1.0000$$

$$DL = 0.1602$$

$$BEC = 0.04044$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8.33	0.0000	P	100.3
2	☐	1.000	1.023	733.38	0.0003	P	7.7
3	☐	10.000	10.199	6699.07	0.0028	P	9.0
4	☐	250.000	260.683	178580.56	0.0726	P	5.3
5	☐	625.000	626.496	455827.49	0.1744	P	2.0
6	☐	1250.000	1294.815	944805.56	0.3604	P	5.5
7	☐	2500.000	2483.737	1904808.60	0.6913	A	2.9
8	☐	5000.000	4996.206	3842646.09	1.3905	A	2.5
9	☐			1550.14	0.0005	P	5.2

$$y = 2.7831\text{E-}004 * x + 3.2531\text{E-}006$$

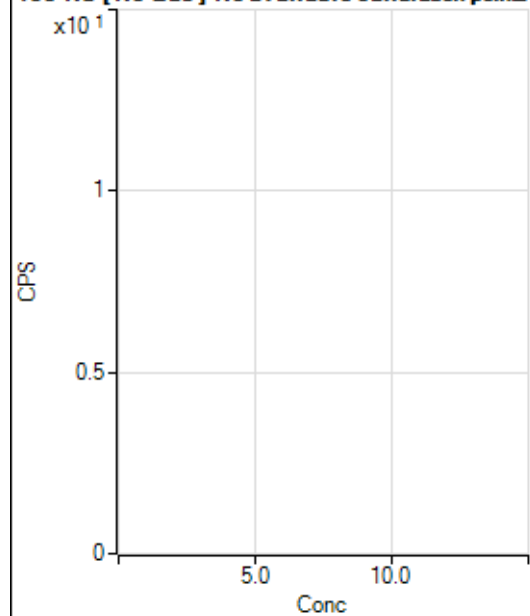
$$R = 1.0000$$

$$DL = 0.03516$$

$$BEC = 0.01169$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.55		P	24.8
2	☐			11.11		P	91.7
3	☐			4.45		P	86.6
4	☐			8.89		P	43.3
5	☐			13.33		P	86.6
6	☐			35.55		P	65.9
7	☐			20.00		P	33.4
8	☐			97.78		P	30.7
9	☐			11.11		P	124.9

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			3.33		P	100.1
6	☐			3.33		P	173.2
7	☐			6.67		P	100.0
8	☐			20.00		P	16.7
9	☐			3.33		P	100.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.0
2	☐			13.89		P	91.6
3	☐			11.11		P	43.3
4	☐			8.33		P	100.0
5	☐			19.45		P	24.7
6	☐			47.22		P	27.0
7	☐			80.56		P	33.3
8	☐			127.78		P	32.8
9	☐			416.69		P	24.3

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	173.2
2	☐			2.22		P	86.6
3	☐			5.56		P	91.6
4	☐			4.44		P	43.4
5	☐			15.55		P	44.6
6	☐			16.67		P	40.0
7	☐			41.11		P	28.5
8	☐			67.78		P	22.2
9	☐			324.45		P	4.2

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.55		P	15.7
2	☐			11.11		P	43.3
3	☐			27.78		P	62.5
4	☐			25.00		P	66.7
5	☐			50.00		P	28.9
6	☐			61.11		P	28.4
7	☐			72.22		P	24.0
8	☐			119.45		P	4.0
9	☐			530.58		P	9.2

160 Gd [He] No available calibration points

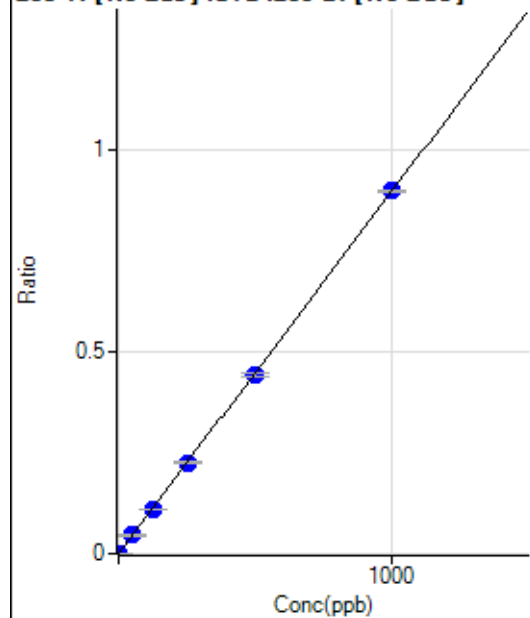
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	62.5
2	☐			3.33		P	100.1
3	☐			7.78		P	99.0
4	☐			13.33		P	43.3
5	☐			27.78		P	38.6
6	☐			28.89		P	58.1
7	☐			54.45		P	24.7
8	☐			105.56		P	1.8
9	☐			307.79		P	5.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	50.0
2	☐			13.89		P	69.3
3	☐			11.11		P	114.6
4	☐			25.00		P	33.3
5	☐			16.67		P	50.0
6	☐			16.67		P	132.3
7	☐			33.33		P	25.0
8	☐			50.00		P	0.0
9	☐			75.00		P	11.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐			12.22		P	15.7
3	☐			4.44		P	43.4
4	☐			6.67		P	0.0
5	☐			13.33		P	NaN
6	☐			10.00		P	33.3
7	☐			12.22		P	31.5
8	☐			25.55		P	27.1
9	☐			42.22		P	25.4

203 Tl [No Gas] ISTD :209 Bi [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	25.00	0.0000	P	58.7
2	☐	0.100	0.091	125.00	0.0001	P	31.9
3	☐	1.000	0.993	1072.30	0.0009	P	14.0
4	☐	50.000	50.881	56194.50	0.0456	P	3.8
5	☐	125.000	121.759	142294.40	0.1092	P	2.6
6	☐	250.000	252.284	294896.87	0.2262	P	3.3
7	☐	500.000	494.986	608834.48	0.4439	P	2.7
8	☐	1000.000	1002.297	1248943.05	0.8988	P	0.6
9	☐			813.94	0.0006	P	1.1

$$y = 8.9668E-004 * x + 1.9775E-005$$

$$R = 1.0000$$

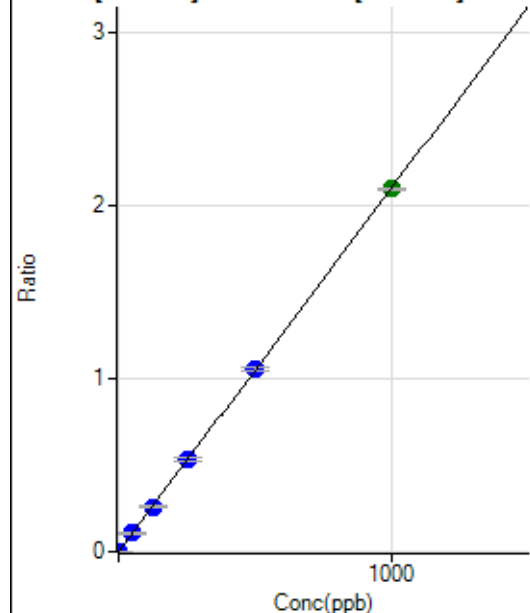
$$DL = 0.03883$$

$$BEC = 0.02205$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	41.67	0.0000	P	34.4
2	☐	0.100	0.096	288.90	0.0002	P	22.1
3	☐	1.000	0.990	2489.21	0.0021	P	8.8
4	☐	50.000	50.723	131000.93	0.1065	P	6.0
5	☐	125.000	123.707	338260.77	0.2596	P	1.6
6	☐	250.000	254.730	696585.16	0.5345	P	3.9
7	☐	500.000	501.748	1444079.97	1.0528	P	2.0
8	☐	1000.000	998.069	2909990.89	2.0941	A	0.4
9	☐			1716.83	0.0013	P	4.1

$$y = 0.0021 * x + 3.2820E-005$$

$$R = 1.0000$$

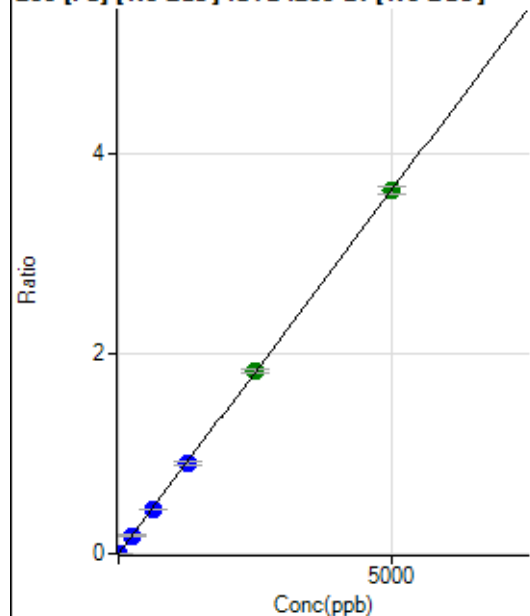
$$DL = 0.01616$$

$$BEC = 0.01564$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	85.19	0.0001	P	19.6
2	☐	0.100	0.120	190.74	0.0002	P	23.3
3	☐	1.000	1.095	1014.87	0.0009	P	15.8
4	☐	250.000	249.427	223352.34	0.1815	P	4.9
5	☐	625.000	607.155	575468.78	0.4416	P	1.6
6	☐	1250.000	1246.371	1181535.08	0.9065	P	3.4
7	☐	2500.000	2521.026	2515014.29	1.8335	A	1.9
8	☐	5000.000	4992.653	5045779.86	3.6310	A	2.2
9	☐			9744.56	0.0073	P	5.1

$$y = 7.2725E-004 * x + 6.7101E-005$$

$$R = 1.0000$$

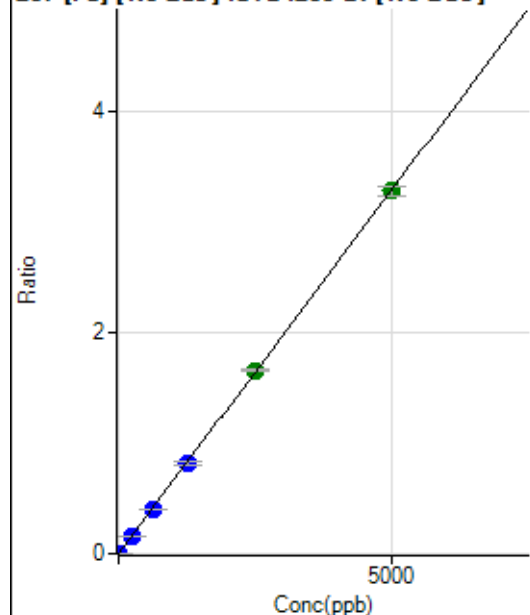
$$DL = 0.05417$$

$$BEC = 0.09227$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0001	P	46.6
2	☐	0.100	0.105	150.00	0.0001	P	13.3
3	☐	1.000	0.926	777.82	0.0007	P	16.5
4	☐	250.000	244.087	197602.41	0.1606	P	4.9
5	☐	625.000	606.903	520217.06	0.3992	P	1.2
6	☐	1250.000	1247.603	1069562.23	0.8206	P	3.3
7	☐	2500.000	2523.335	2276528.24	1.6596	A	0.7
8	☐	5000.000	4991.490	4561798.54	3.2828	A	2.6
9	☐			9003.27	0.0067	P	1.7

$$y = 6.5767\text{E-}004 * x + 5.2529\text{E-}005$$

$$R = 1.0000$$

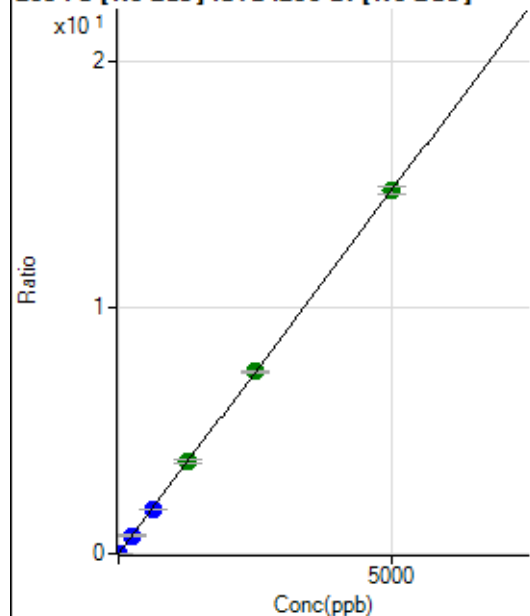
$$DL = 0.1116$$

$$BEC = 0.07987$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	337.04	0.0003	P	25.4
2	☐	0.100	0.093	666.68	0.0005	P	8.5
3	☐	1.000	1.000	3781.77	0.0032	P	13.6
4	☐	250.000	246.518	894791.05	0.7270	P	5.1
5	☐	625.000	605.009	2324289.00	1.7837	P	1.9
6	☐	1250.000	1266.766	4867273.04	3.7345	A	3.7
7	☐	2500.000	2506.150	10134178.82	7.3880	A	1.7
8	☐	5000.000	4995.406	20463485.12	14.7259	A	2.1
9	☐			40128.72	0.0299	P	2.3

$$y = 0.0029 * x + 2.6571\text{E-}004$$

$$R = 1.0000$$

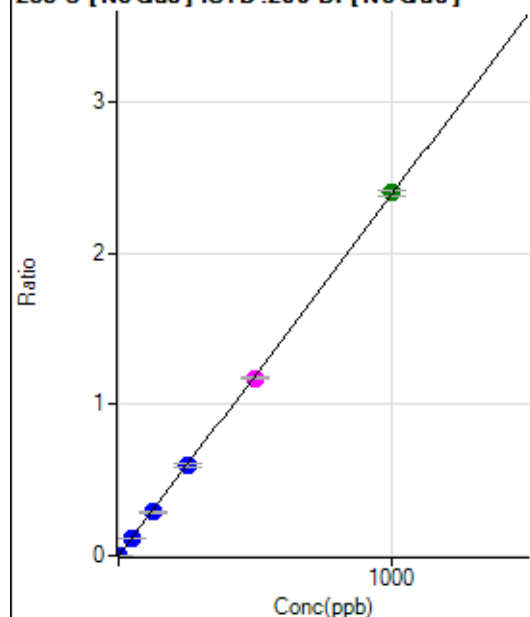
$$DL = 0.06878$$

$$BEC = 0.09014$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.55	0.0000	P	86.6
2	☐	0.100	0.086	258.34	0.0002	P	17.1
3	☐	1.000	1.071	3019.89	0.0026	P	8.4
4	☐	50.000	49.269	144573.04	0.1175	P	4.7
5	☐	125.000	120.304	373762.68	0.2868	P	1.1
6	☐	250.000	249.622	775486.89	0.5951	P	4.5
7	☐	500.000	491.301	1606672.12	1.1713	M	1.4
8	☐	1000.000	1005.068	3329671.00	2.3961	A	1.4
9	☐			677.81	0.0005	P	14.6

$$y = 0.0024 * x + 4.3696E-006$$

$$R = 0.9999$$

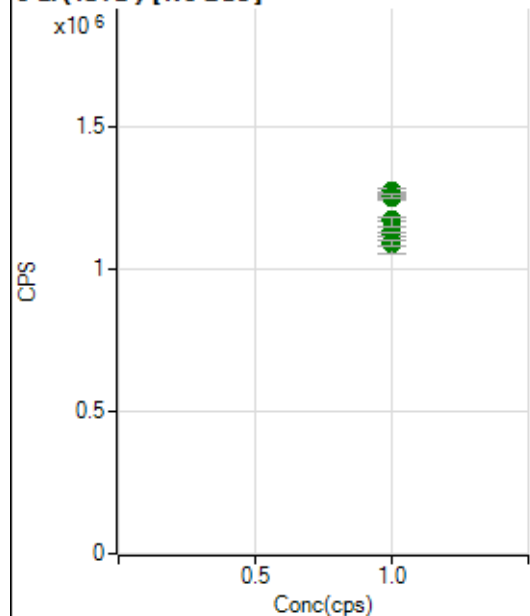
$$DL = 0.004763$$

$$BEC = 0.001833$$

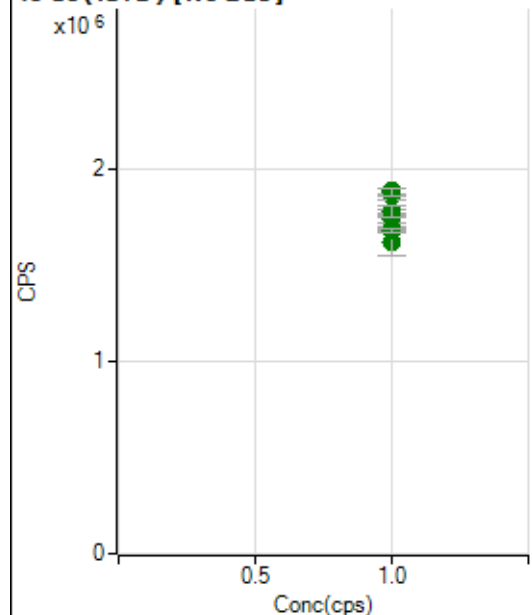
Weight: <None>

Min Conc: 0

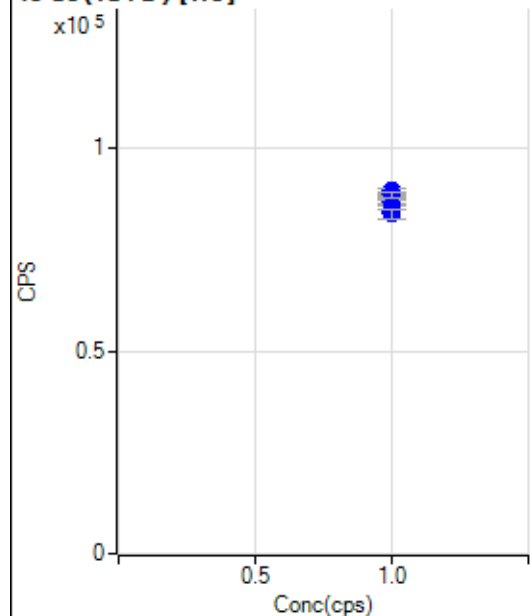
6 Li (ISTD) [No Gas]



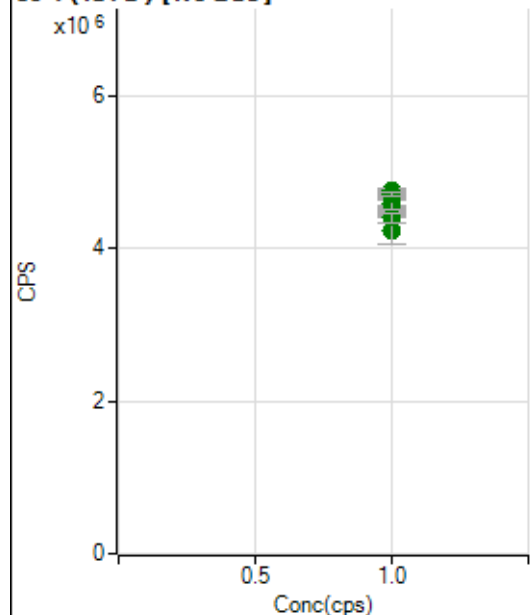
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1131724.51		A	3.1
2	☐	1.000		1118675.89		A	0.8
3	☐	1.000		1082441.37		A	5.9
4	☐	1.000		1089159.23		A	2.1
5	☐	1.000		1175360.17		A	1.1
6	☐	1.000		1163333.37		A	3.4
7	☐	1.000		1245014.18		A	1.2
8	☐	1.000		1272101.08		A	1.1
9	☐	1.000		1253862.88		A	0.8

45 Sc (ISTD) [No Gas]

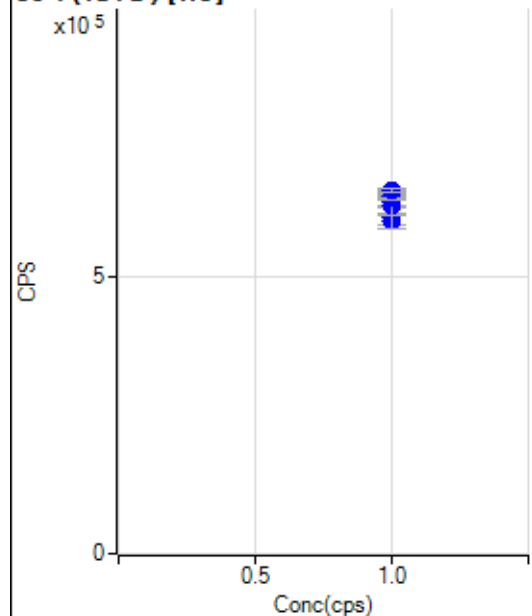
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1735336.55		A	2.0
2	☐	1.000		1686486.28		A	0.9
3	☐	1.000		1617831.87		A	9.3
4	☐	1.000		1676902.18		A	0.8
5	☐	1.000		1773835.67		A	1.2
6	☐	1.000		1776926.40		A	3.3
7	☐	1.000		1852349.62		A	1.6
8	☐	1.000		1882430.32		A	1.6
9	☐	1.000		1873623.88		A	2.4

45 Sc (ISTD) [He]

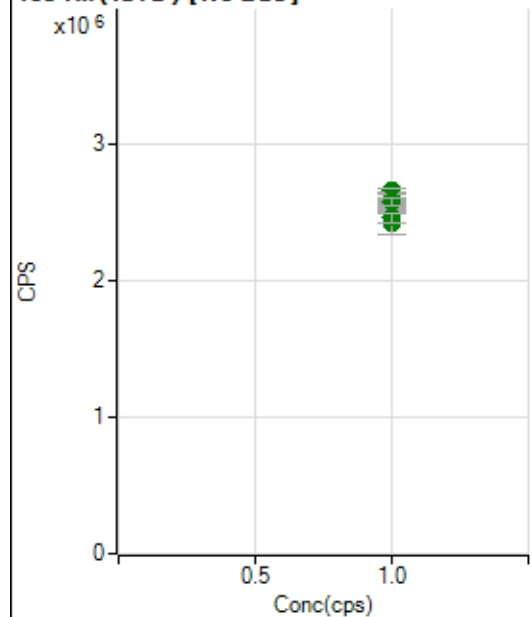
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		88289.44		P	1.4
2	☐	1.000		84346.19		P	4.4
3	☐	1.000		84138.65		P	4.0
4	☐	1.000		88211.60		P	1.6
5	☐	1.000		87086.26		P	4.4
6	☐	1.000		88548.86		P	0.8
7	☐	1.000		89546.99		P	1.9
8	☐	1.000		87386.33		P	0.7
9	☐	1.000		88601.85		P	1.5

89 Y (ISTD) [No Gas]

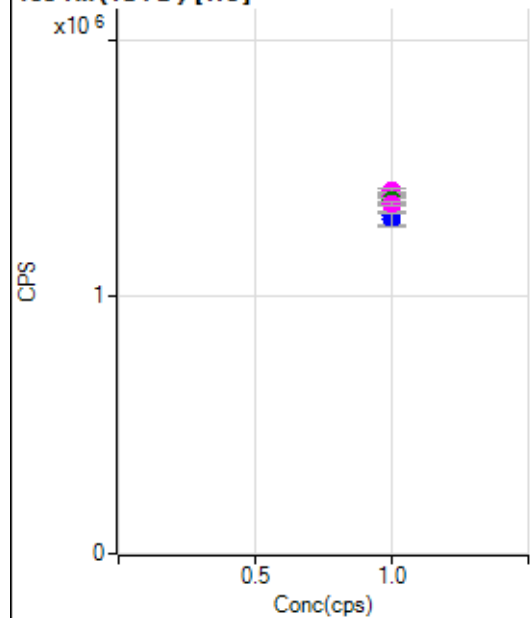
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4560638.44		A	0.6
2	☐	1.000		4464738.26		A	1.5
3	☐	1.000		4243937.92		A	8.2
4	☐	1.000		4409224.73		A	3.0
5	☐	1.000		4601526.56		A	1.6
6	☐	1.000		4590572.22		A	3.4
7	☐	1.000		4744749.83		A	1.0
8	☐	1.000		4758436.18		A	1.7
9	☐	1.000		4721891.39		A	1.3

89 Y (ISTD) [He]

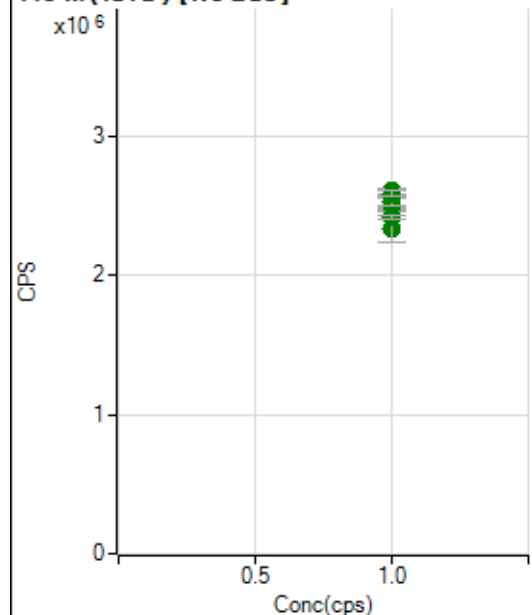
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		627968.31		P	0.4
2	☐	1.000		608417.19		P	5.5
3	☐	1.000		600158.66		P	5.1
4	☐	1.000		634514.05		P	2.0
5	☐	1.000		626191.46		P	4.8
6	☐	1.000		645556.54		P	0.5
7	☐	1.000		646640.08		P	2.4
8	☐	1.000		641220.32		P	0.5
9	☐	1.000		654424.37		P	0.9

103 Rh (ISTD) [No Gas]

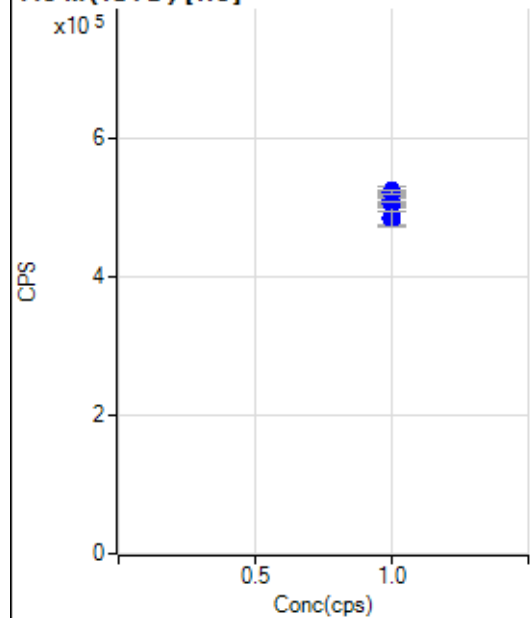
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2559589.60		A	0.9
2	☐	1.000		2529672.48		A	1.4
3	☐	1.000		2428235.75		A	7.5
4	☐	1.000		2465589.20		A	3.0
5	☐	1.000		2573992.31		A	1.2
6	☐	1.000		2575071.78		A	2.6
7	☐	1.000		2660744.51		A	0.9
8	☐	1.000		2614942.23		A	2.1
9	☐	1.000		2576707.59		A	2.1

103 Rh (ISTD) [He]

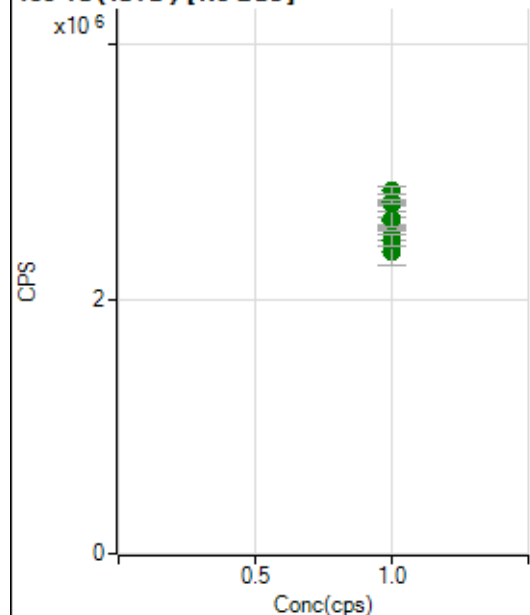
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1357145.57		M	0.6
2	☐	1.000		1316715.90		P	5.2
3	☐	1.000		1300483.42		P	4.3
4	☐	1.000		1374684.47		M	2.1
5	☐	1.000		1360479.75		P	5.4
6	☐	1.000		1390130.56		M	1.0
7	☐	1.000		1411999.34		M	1.0
8	☐	1.000		1376837.20		A	1.6
9	☐	1.000		1362077.17		M	0.6

115 In (ISTD) [No Gas]

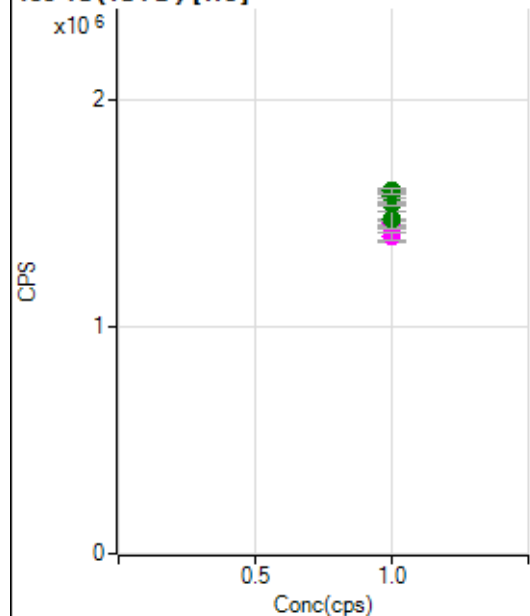
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2481412.19		A	0.9
2	☐	1.000		2432835.42		A	2.1
3	☐	1.000		2335120.94		A	8.6
4	☐	1.000		2418680.00		A	1.1
5	☐	1.000		2509301.23		A	0.1
6	☐	1.000		2526105.34		A	2.1
7	☐	1.000		2609473.10		A	1.6
8	☐	1.000		2607890.42		A	1.3
9	☐	1.000		2592428.77		A	1.3

115 In (ISTD) [He]

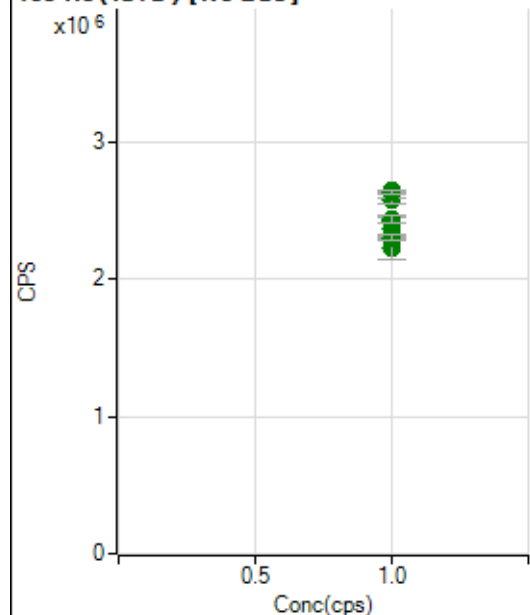
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		503559.83		P	0.2
2	☐	1.000		486732.32		P	5.0
3	☐	1.000		482917.97		P	4.2
4	☐	1.000		506459.48		P	2.5
5	☐	1.000		504038.48		P	4.6
6	☐	1.000		520323.91		P	0.4
7	☐	1.000		523313.26		P	2.3
8	☐	1.000		511152.24		P	1.0
9	☐	1.000		521236.04		P	1.0

159 Tb (ISTD) [No Gas]

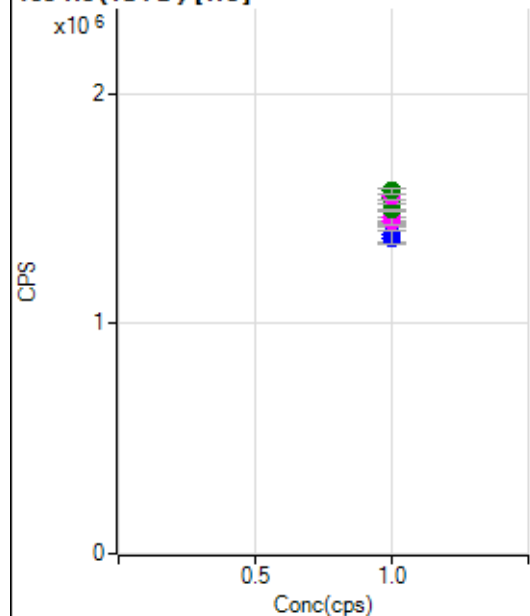
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2561774.86		A	0.4
2	☐	1.000		2546832.52		A	0.7
3	☐	1.000		2368068.30		A	8.4
4	☐	1.000		2463040.92		A	3.6
5	☐	1.000		2615092.48		A	2.7
6	☐	1.000		2626123.90		A	4.6
7	☐	1.000		2756048.47		A	1.2
8	☐	1.000		2763651.87		A	1.0
9	☐	1.000		2852487.28		A	2.2

159 Tb (ISTD) [He]

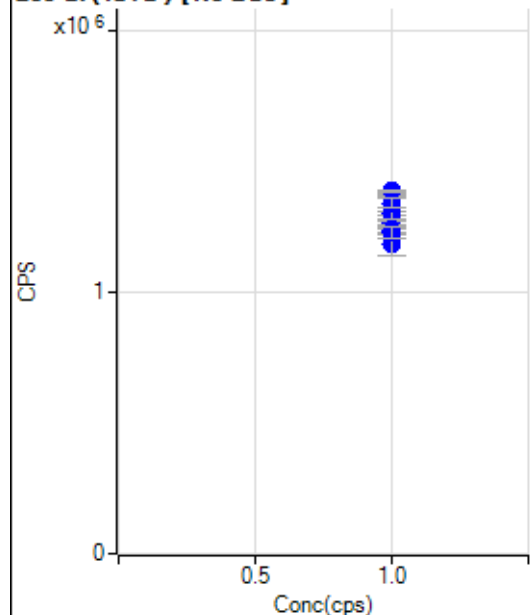
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1466305.43		M	0.5
2	☐	1.000		1411476.74		M	5.1
3	☐	1.000		1396478.01		M	2.8
4	☐	1.000		1458640.53		M	2.5
5	☐	1.000		1471675.15		A	5.2
6	☐	1.000		1538037.72		A	0.7
7	☐	1.000		1570726.38		A	2.5
8	☐	1.000		1582177.93		A	1.9
9	☐	1.000		1597515.29		A	1.4

165 Ho (ISTD) [No Gas]

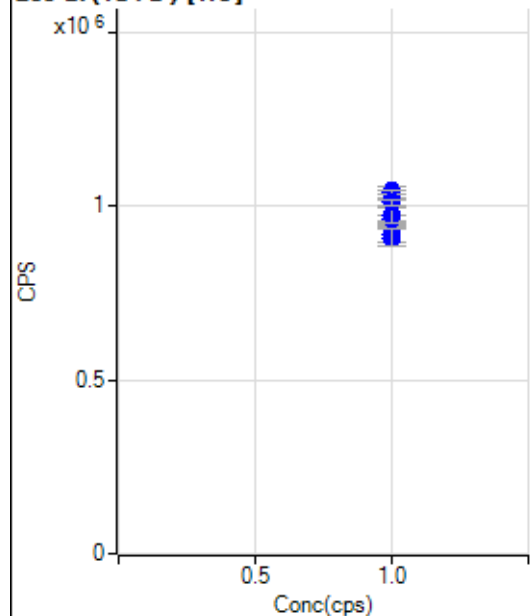
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2372310.69		A	3.3
2	☐	1.000		2295999.31		A	1.1
3	☐	1.000		2224964.44		A	7.1
4	☐	1.000		2304368.93		A	1.9
5	☐	1.000		2430815.09		A	1.5
6	☐	1.000		2445976.90		A	2.3
7	☐	1.000		2578275.56		A	1.8
8	☐	1.000		2647010.11		A	0.8
9	☐	1.000		2639219.59		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1439947.65		P	0.6
2	☐	1.000		1387561.01		P	5.1
3	☐	1.000		1372965.73		P	4.0
4	☐	1.000		1446451.00		M	2.4
5	☐	1.000		1461320.03		M	4.4
6	☐	1.000		1492305.55		A	0.8
7	☐	1.000		1542346.66		A	3.0
8	☐	1.000		1551121.99		M	1.7
9	☐	1.000		1575558.14		A	1.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1268753.83		P	1.2
2	☐	1.000		1234581.58		P	1.5
3	☐	1.000		1185018.63		P	7.7
4	☐	1.000		1231585.76		P	3.7
5	☐	1.000		1303299.27		P	1.5
6	☐	1.000		1304398.23		P	3.3
7	☐	1.000		1371775.50		P	0.5
8	☐	1.000		1389642.62		P	0.7
9	☐	1.000		1342107.76		P	2.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		950262.57		P	0.8
2	☐	1.000		917884.54		P	5.2
3	☐	1.000		909366.32		P	5.2
4	☐	1.000		963279.51		P	1.8
5	☐	1.000		973251.27		P	4.9
6	☐	1.000		1019289.71		P	0.6
7	☐	1.000		1044005.04		P	2.0
8	☐	1.000		1040486.92		P	1.1
9	☐	1.000		1011429.39		P	1.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8021121MS.b
Acq. Date-Time 2021-02-11 12:06:06
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		2755	27545.30			1.156	5.000
24		30276	302758.65			0.821	5.000
25		4146	41464.91			1.354	5.000
26		4743	47431.82			1.285	5.000
59		5202	52017.36			0.919	5.000
113		2094	20938.26			0.176	5.000
115		7195	71945.93			0.980	5.000
206		2008	20080.23			1.181	5.000
207		1677	16774.90			0.994	5.000
208		4128	41282.17			1.231	5.000
220		1	9.80			10.580	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

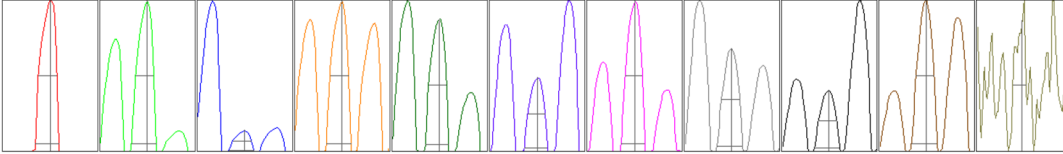
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2783	2793	2729	2722	2746
24	30295	30692	30085	30094	30213
25	4162	4238	4110	4100	4123
26	4787	4820	4715	4665	4729
59	5262	5219	5136	5175	5216
113	2099	2095	2089	2094	2092
115	7320	7171	7156	7167	7158
206	2007	2020	1969	2032	2012
207	1688	1689	1653	1691	1667
208	4110	4158	4047	4154	4171

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	1	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	5032.63	9.05	8.90 - 9.10	
24	55944.82	24.00	23.90 - 24.10	
25	7522.08	25.00	24.90 - 25.10	
26	8579.01	26.00	25.90 - 26.10	
59	9713.65	59.00	58.90 - 59.10	
113	4041.84	113.05	112.90 - 113.10	
115	14003.89	115.05	114.90 - 115.10	
206	3666.44	206.00	205.90 - 206.10	
207	3078.37	207.00	206.90 - 207.10	
208	7639.86	208.00	207.90 - 208.10	
220	1.45	219.95	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.737	0.900	
24	0.56	0.782	0.900	
25	0.59	0.777	0.900	
26	0.59	0.783	0.900	
59	0.57	0.736	0.900	
113	0.54	0.732	0.900	
115	0.53	0.761	0.900	
206	0.58	0.810	0.900	
207	0.57	0.806	0.900	
208	0.57	0.819	0.900	
220	0.42			

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.52 L/min Dilution Gas 0.47 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.6 V	Deflect	16.4 V
Extract 2	-215.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-115 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	160 V		

QP Parameters

Mass Gain	121	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm
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EM

Discriminator	4.0 mV	Analog HV	2190 V	Pulse HV	1356 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		1264	12638.80			1.305	
89		7142	71418.91			0.442	
205		2151	21509.97			0.863	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1265	1246	1282	1278	1248
89	7138	7190	7152	7123	7107
205	2154	2167	2167	2122	2146

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.52 L/min	Dilution Gas	0.47 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.6 V	Deflect	5.2 V
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US EPA Tune Check Report

Extract 2	-215.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	121	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.02		
Hardware Settings					
Torch					
Torch H	0.6 mm	Torch V	-0.3 mm		
EM					
Discriminator	4.0 mV	Analog HV	2190 V	Pulse HV	1356 V